

June 24, 1994

TERROR 2000:

The Future Face of Terrorism

by

Marvin J. Cetron and Peter S. Probst

The views expressed in this study are those of the authors and do not necessarily reflect the views of the Department of Defense or the United States Government.

TABLE OF CONTENTS

Part I: Background

Acknowledgments

Chapter 1. Introduction: State of Play

Chapter 2. The Essence of Terrorism

Part II: The Forecasting Process

Chapter 3. A Baseline Future

Chapter 4. Forecasting Methodology

Chapter 5. Future Scenarios

Part III: Forecasts and Recommendations

Chapter 6. Targets and Tactics

Chapter 7. Future Face of Terrorism

Chapter 8. What Must Be Done

Part IV: Once and Future Conflict

Chapter 9. Middle East and Africa

Chapter 10. Asia and Its Environs

Chapter 11. Europe

Chapter 12. The Former Soviet Union

Chapter 13. Latin America

Chapter 14. Target USA

Part V: Appendices and References

Appendix A. The World's Deadliest Terrorist Groups

Appendix B. Key Annotated References

Appendix C. Preliminary Scenarios

Appendix D. 74 Major North American Trends

Appendix E. 50 Major World Trends

Appendix F. Critical Technologies for the Future

Acknowledgments

Each year the Department of Defense convenes its Worldwide Combatting Terrorism Conference in order to review the nature and level of terrorist activity around the globe. The purpose is to identify changing motives, tactics and targets so our government may better defend our interests and those of our friends and allies.

The fifth annual conference, held in June 1993, was somewhat different. This time the focus was not on the immediate future, but included an examination of the long-term threat. Participation which traditionally had been limited to preeminent intelligence, military, political and academic specialists from around the world was broadened to include leading futurists. This elite group was given two assignments. First, they must forecast, to the best of their ability, the course of terrorism for the next fifteen years. Then on the basis of their projections, they would help craft policies, strategies and tactics by suggesting courses of action and specific initiatives to meet the developing threat as they foresaw it. There would be no sacred cows. All aspects of America's policy for combatting terrorism would be on the table for examination and discussion.

It was decided that a study would be prepared to apprise the government and the public of the conference findings and of subsequent research that would focus on the long-term terrorist threat and what must be done to meet the challenge. The object would be to stimulate discussion and examination by providing a provocative, unconstrained and independent point of view rather than a "coordinated," homogenized distillation of current thinking.

To carry out this task, a Terrorist Advisory Board and a Futurist Advisory Board were established. Selected because of their knowledge, experience, and accomplishments, they include theoreticians, counterterrorism specialists, senior law enforcement and intelligence officials, as well as individuals drawn from the senior ranks of the U.S. Government's policy community. Without their insight, wisdom, and patience, this study could not have been possible.

Our colleagues in the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict identified the terrorism experts we needed and persuaded them to support our effort. Constituted as the Terrorism Advisory Board, they helped formulate the study and reviewed the product. Members include:

A senior U.S. intelligence official, who has served as the National Intelligence Officer for Terrorism and Warning;

Ambassador L. Paul Bremer, of Kissinger Associates;

Dr. Yigal Carmon, former counter terrorism advisor to Israeli prime ministers Shamir and Rabin;

Dr. Roy Godson, of the Consortium for the Study of Intelligence, Georgetown University;

Dr. Bruce Hoffman, director of strategy and doctrine, the RAND Corporation;

Brian Jenkins, senior managing director, Kroll Associates;

Dr. Robert Kupperman, senior scientific advisor, Center for Strategic and International Studies;

Oliver "Buck" Revell, former chief for counterintelligence and counterterrorism and former executive assistant director for investigations, Federal Bureau of Investigation;

Paul Wilkinson, professor of international relations at the University of St. Andrews, St. Andrews, Scotland; and Director, Research Institute for the Study of Conflict and Terrorism, London, England.

The Forecasting Advisory Board was drawn from leaders in the field who are well known to us and are of international renown. They helped develop the scenarios which was a major contribution to our terrorism study and reviewed the manuscript, providing insightful comment and invaluable suggestions. They include:

Dr. Clement Bezold, of the Institute for Alternative Futures;

Dr. Marvin J. Cetron, president of Forecasting International;

Joseph Coates, of Coates and Jarratt Associates;

Dr. Vary Coates, of the Congressional Office of technology Assessment;

Edward Cornish, president of the World Future Society;

Owen Davies, former technology editor of OMNI Magazine;

Margaret Gayle, of the 21st Century Futures Corp.;

Jerome C. Glenn of the Millennium Project, United Nations University;

Dr. William E. Halal, of George Washington University;

Dr. Jean Johnson, of the National Science Foundation;

Charles Taylor, of the U.S. Army War College Strategic Studies Institute;

Timothy H. Willard, former managing editor of *The Futurist*.

Many other widely respected specialists graciously helped with our research. Among them were:

Dr. Mumtaz Ahmad, of Hampton University, Hampton, VA;

Dr. Yonah Alexander, director of the terrorism program at George Washington University;

Edward Badolato, president of Contingency Management Services, Inc.;

Dr. Edward J. Cetron, Technologies International Limited, Inc.;

Taylor Jesse Clear, of the U.S. Foreign Service;

Dr. Khalid Duran, of the Institute for Iranian Studies, Freie University, Berlin;

Dr. John L. Esposito, of George Washington University;

Maj. Robert W. Freniere, Aircrew Intelligence Branch, Westover AFB;

Col. Bruce Gerrity, Office of the Secretary of Defense;

H. Allen Holmes, Office of the Secretary of Defense;

Maj. Gen. Oleg Kalugin (Ret.), of the KGB;

Michael Kinney, Computer Sciences Corporation;

Noel C. Koch, president, International Securities Management;

Col. Douglas Menarchik, Office of the Secretary of Defense;

Peter S. Probst, Office of the Secretary of Defense;

Joshua Sinai, Library of Congress;

Dr. Stephen Sloan, of the University of Oklahoma, Norman, OK;

General Wesley B. Taylor, Jr., Office of the Secretary of Defense;

Frederick W. Vaughn, Technologies International Limited, Inc.;

George Weigel, president of The Ethics and Public Policy Center, Washington, DC.

Introduction: State of Play

"The trouble with our times is that the future is not what it used to be." - Paul Valery

In what is left of Bosnia where Serbs, Croats, and Muslims had lived peacefully together for decades, rape, slaughter and genocide have left a legacy that will perpetuate communal violence and blood feud for generations to come. On the West Bank, Gaza, and the Golan, a dream of peace moves towards reality as a result of the accord signed by the Palestine Liberation Organization and Israel. Yet terrorist attacks continued even before an Israeli zealot massacred Palestinians at prayer. In Ulster, the British and Irish governments have finally hammered together a framework for peace. Yet the Provisional Irish Republican Army, better known as the IRA, continues to murder British troops and Irish civilians, and even targets civil aviation as demonstrated by the four mortar attacks against Heathrow Airport.

In Russia, a neo-fascist named Vladimir Zhirinovsky promises to rebuild the old Soviet empire and reduce any nation that interferes to a radioactive wasteland; his litany of threats has made him, at least temporarily, the most popular politician in the country. In Germany and Austria, floods of refugees from the East molder in refugee camps. Deprived of hope and targets of right wing hatred and violence, they could become the "New Palestinians." North Korea, one of the most erratic regimes on the planet is building nuclear weapons and threatens the peace. And, on February 26, 1993, in the heart of New York's financial district, a massive truck bomb almost brought down the World Trade Center and shattered the illusion that, at least on American soil, Americans were safe from international terrorism.

Welcome to the world after the Cold War. It is not nearly as peaceful as the optimists once hoped it would be. Our world could grow even more violent before we find a new equilibrium to replace the order established in the late 1940s.

This book grew out of an effort to make sense of one aspect of the chaos of a world in transition, the threat of terrorism. It seeks to help both the public and the policy maker understand better what terrorism is and what it is not, why it will emerge as a strategic threat--in what many hoped would be a new era of peace--and what we must do about it.

It is a subject that affects us all. As the effective leader of the democratic world and the most powerful and prosperous symbol of capitalist materialism, the chief supporter of Israel and the "Great Satan" to radical Islamists, the United States ranks as a prime target for virtually any terrorist group that wants to earn its spurs or harbors a grudge against the West. For these groups, American citizens at home or abroad are prime targets and increasingly will be at risk.

Moreover, with the disintegration of the Soviet empire, the United States has emerged as the sole remaining superpower. As a result, it is unlikely that any nation would challenge our interests through conventional warfare. Rather, they would likely rely on indirect forms of aggression--the ideal weapon being cheap, persuasive, and deniable--in short, terrorism.

Modern communications have helped to confirm terrorism as the weapon of choice for almost any cause the world over. In the "global village," images of Pan Am 103 or the carnage of the Marine barracks in Beirut convey a potent message, even in instances when we are not directly the target. Increasingly, the terrorist struggle is fought on many levels and with a variety of weapons. Whether of bullets or rhetoric, the United States often is the terrorist's ultimate target. Both government

agencies and private citizens must understand how and why we are under attack and what must be done in response.

This attempt to understand terrorism was unique in many ways. It was the first study to apply standard forecasting methods to the problem of terrorism. It was also the first to include experts in both terrorism and technological forecasting. And it sought help from an unprecedented range of authorities with extraordinary credentials.

In preparing this study, we incorporated the views of government leaders and intelligence experts, from Ambassador L. Paul Bremer, of Kissinger Associates, who served as the State Department's point man for combatting terrorism; Dr. Bruce Hoffman, director of strategy and doctrine for the RAND Corporation; Dr. Paul Wilkinson, director of the Research Institute for the Study of Conflict and Terrorism, in London; Dr. Brian Jenkins, internationally known terrorism expert and deputy chairman of Kroll Associates; and Dr. Yigal Carmon, the former counterterrorism advisor to Israeli Prime Ministers Rabin and Shamir. We also consulted with renowned Islamic scholars, Dr. John Esposito, of Georgetown University, and Dr. Khalid Duran, of the Institute of Iranian Studies at Freie Universitat Berlin; with Dr. Robert Kupperman, senior scientist at the Center for Strategic and International Studies; and with terrorism experts from the Defense Intelligence Agency, the Federal Bureau of Investigation, and other members of the Intelligence Community. We even met with Maj. Gen. Oleg Kalugin, former head of the Foreign Counterintelligence Directorate of the Soviet KGB, a man who once trained, sheltered, armed, and paid some of the world's most notorious terrorists. The result is an unprecedented insight into terrorism and the world of 2000 and beyond.

That world grows directly from the worst aspects of today's chaos. In only the past five years, the political landscape we have known for more than forty years has

been forever changed. Communism has collapsed, the Soviet Union has disintegrated, and the satellite states of Eastern Europe are in turmoil. We have moved from a bipolar world dominated by two superpowers to a world in transition.

And a startling transition it is. As recently as three or four years ago, all but the most pessimistic observers hoped that the end of the Cold War would bring a new era of global peace. Instead, forces, movements, and ideologies battle for control of the world left behind by the old order. Some are new; many harken back to the days before World War I. Violent religious and ethnic nationalisms challenge established state structures, and various strains of militant Islam seek to purge the Middle East of Western influence, and ultimately to dominate Islamic communities in Europe, Africa, the Pacific Rim, and the Americas. Terrorism, insurgency, and genocide are rampant, and the community of nations all but turns a blind eye toward depredations that only a few years ago would have been branded "war crimes." The Cold War may have died, but mayhem lives on.

Terrorism, in fact, has become a growth industry. In manpower, in the causes they support, in sophistication and weaponry, the terrorists of 2000 and 2010 could make even their most feared predecessors appear restrained.

The proliferation of terrorists themselves has been especially dramatic. In 1968, scarcely a dozen active terrorist groups could be identified in the world. By 1993, the number had passed seventy--this despite the retirement or destruction of many terrorist organizations that once were widely feared.

More causes inspire terrorism today than in years past. In history, only religion carried the emotional force to cause actions so far outside social norms. With rare exceptions, the random slaughter of innocents had to be justified as God's will. In the 19th century, Marxism, nationalism, and anarchism joined the list. Today, almost any cause can find supporters willing to use terror as a weapon. Islamic ex-

tremists remain driven by a religious imperative; organizations such as Hezbollah have strong religious and ethnic loyalties, but act primarily to further political goals; Puerto Rican separatists and Peru's Sendero Luminoso have no religious motivations at all.

Perhaps one-fifth of all terrorist organizations are grounded in religious extremism. Though radical Islamic fundamentalist factions have received the most publicity, Christian, Jewish, Hindu, and Sikh terrorist organizations are active and dangerous. Religiously motivated terrorists commit roughly one-third of all terrorist acts, they cause well over half of the deaths that occur in terrorist operations.

Ethnic terrorist organizations practice their trade for a broad spectrum of political, social, cultural, and religious concerns. In Northern Ireland, the Provisional Irish Republican Army and its Protestant counterparts battle for political control across a religious divide. In Spain and France, the Basque separatists fight for an ethnic homeland. South Africa alone harbors as many as seventy white supremacist organizations.

Recently, an old and ugly brand of ethnic violence has reappeared in Europe--not the uncontrolled slaughter of Bosnia, but the random thuggery of German right-wing extremists. In the years to come, beatings, arson, and murder increasingly will be directed against immigrants in lands we generally consider civilized. There will be many opportunities for xenophobia, as war and poverty continue to displace millions of refugees from their homelands. Within the United States, our own nativist terrorist organizations prey upon Asian immigrants as well as on religious and other minorities.

In Southwest Asia, factional conflicts have inspired terrorism in almost every land. Religious terrorism, as a component of communal violence, is as endemic to the Indian Subcontinent as to the Middle East. In India, tribal, religious and ethnic

conflict is made manifest in murder, arson, and riot. In Sri Lanka, Tamils kill and are murdered in return. In Bangladesh, Hindus and Muslims do battle with each other. Though terrorist organizations are active in all three countries, how much of this violence is organized or inspired by outside forces remains unclear.

In recent years, criminal organizations such as the Colombian drug cartels, the Sicilian Mafia, and the Neapolitan Camorra have raised criminally-motivated terrorism to something of an art form--their aim being to intimidate governments and others who would dare to oppose them. In this gray area, where criminality melds with commerce, sophisticated conspiracies manipulate financial markets and wield their own brand of potent political power. As the BCCI scandal demonstrated, the largest of these organizations can sway governments around the world.

Single-issue groups increasingly use terrorism to spread their messages. To date, anti-nuclear elements in South Africa, Spain, and France, have carried out ineffective attacks on nuclear power plants, both under construction and operational; we can expect someone, someday to mount a credible attack on a working reactor, possibly with devastating results. Radical animal-rights activists have destroyed medical research laboratories and threatened scientists; at least one has attempted murder. The most extreme of America's anti-abortion activists crossed the line into terrorism long ago.

Recently, we have seen the rise of terrorist affinity groups, small bands of like-minded individuals with little in the way of a formal structure. It may well have been one such group that bombed the New York World Trade Center. The bombers met in the New Jersey and Brooklyn mosques of Sheik Omar Abdel Rahman. They received aid from experienced terrorists in the Islamic immigrant community, many of whom received on-the-job training in the Afghan war. While trial quality evidence may never become available, the Trade Center bombers may also have been

helped by the governments of Iran, Iraq, or Sudan. Yet the conspiracy may have developed almost as casually as a group of lodge members deciding to charter a boat and go fishing on a convenient weekend. We may see many more such ad hoc conspiracies in the future. This is especially likely among the small, but highly visible minority of Islamic extremists, for whom the motivation is strong, the ideology unified, the religious infrastructure well developed, and the license for violence clear.

Yet one of the most dangerous developments is the persistence of state-sponsored terrorism. Where private terrorists can seldom afford their ambitions, the poorest state can provide them sophisticated weapons, send them half-way around the world, and support them with an infrastructure of henchmen protected by diplomatic immunity. As a result, state-sponsored terror has produced some of the deadliest and far-reaching incidents in recent years. The downing of Pan Am 103, the bombing of American Marines in Beirut, and the destruction of the Israeli embassy in Buenos Aires were all prime examples. ✓

State-sponsored terrorism remains a serious threat, although the loss of Soviet support has constrained some well-known terrorist groups and advances in technology and intelligence collection have made it more difficult to conceal responsibility for terrorist operations. Some traditional terrorist states have been discouraged by the threat of detection and reprisal, while others have found it tactically advantageous to negotiate for their goals. In the future, states are likely to use terrorism more judiciously, reserving it primarily for situations that affect their core interests. Consequently, such operations probably will demonstrate greater sophistication, enhanced deniability, and greater political impact. However, new causes will continue to inspire both potential terrorists and countries sympathetic to their aims. As

new rogue states grow more sophisticated in masking their activities, they may well adopt the tactics refined by Iran, Iraq, Syria, Libya, and too many others.

The future may hold even more profound terrors, as sophisticated weapons become increasingly available to anyone with the ability to pay. The political chaos of the former Soviet Union has raised the specter of "loose nukes." Governments known to sponsor terrorism have attempted not only to buy weapons-grade nuclear materials but to hire scientists and technicians who can develop nuclear, biological, and chemical weapons. Even the more sophisticated terrorist organizations are seeking weapons of mass destruction. As the Colt .45 was the great "equalizer" of the nineteenth century American West, so improvised nuclear, biological, and chemical weapons may become the equalizers of the early twenty-first century.

Nuclear weapons may remain out of reach for terrorists, but other threats could be easy to realize. Radioactive materiel can be stolen or diverted, if not from reactor sites, then from less secure medical laboratories or industrial plants. Imagine the impact if the terrorists who carried out the bombing of the World Trade Center had surrounded the bomb's explosive core with cobalt 60, which is widely used in medical applications, or even a mass of nuclear waste left over from a power reactor. The contamination might have left Manhattan's financial district uninhabitable for decades and the ensuing panic not only have shook the American populace but world financial markets.

Chemical and biological weapons have become even easier to build. A bright, motivated student could manufacture the simpler nerve gases in his high-school chemistry laboratory. Genetic engineering is almost as easy, and it could produce biological weapons that would be almost impossible to detect or cure. If terrorists have not used biological or chemical weapons, it is because simple bombs have gotten the publicity they need, while mass slaughter could alienate needed political

sympathizers. That may not always be so. If targeted nations become inured to customary terrorist operations, terrorist groups are likely to turn to mass casualty weapons in order to maintain their credibility and leverage. And for the new classes of terrorist, those moved by religious and ethnic hatreds, the death of their perceived enemies is an end in itself.

As Western society grows more dependent on high technology, it becomes more vulnerable to terrorist attack. Transportation, energy grids, and especially computer and communications networks all are fragile, and most are easily accessible. As these critical systems become increasingly interdependent, the potential impact of any disruption grows exponentially. Hardening these targets against attack will be one of the West's most pressing needs in the 1990s.

All these trends help to tell us where terrorism stands today. But what of the future? We will spend the rest of this book trying to glean some insights as to the nature and directions of terrorism in a rapidly changing world and some guidelines for combatting it effectively. As the British, French, Canadians, and Germans have found, when democracies wage war against virulent terrorism, particularly on their own soil, traditional civil liberties are sometimes abridged. If the World Trade Center bombing proves to be the first shot of a sustained campaign, we will need to find ways to maximize the effectiveness of our efforts to counter terrorism while minimizing the corrosive effects of such a struggle on our liberties and humanity. This will be our primary challenge. This is why this book has been written.

1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the study. The investigator must first identify the problem and then determine the scope of the study. The next step is to design the study. This involves determining the methods to be used and the data to be collected. The third step is to collect the data. This is done by the investigator who is responsible for the study. The fourth step is to analyze the data. This is done by the investigator who is responsible for the study. The fifth step is to interpret the results. This is done by the investigator who is responsible for the study. The sixth step is to write the report. This is done by the investigator who is responsible for the study. The seventh step is to present the results. This is done by the investigator who is responsible for the study. The eighth step is to publish the results. This is done by the investigator who is responsible for the study. The ninth step is to evaluate the results. This is done by the investigator who is responsible for the study. The tenth step is to conclude the study. This is done by the investigator who is responsible for the study.

[illegible][illegible]

The Essence of Terrorism

"If you want a picture of the future, imagine a boot stamping on a human face--for ever." - George Orwell

Before considering our study itself, and the policy recommendations that have grown out of it, we should establish some common ground for the discussion. Just what is terrorism? Why should the United States be concerned with it? How seriously does it threaten American interests? The answers are not always obvious.

To most Americans, terrorists are the quintessential bad guys: violent, foreign, given to stilted rhetoric and bizarre claims--and badly in need of a shave. We view them almost in generic terms, lumping all terrorists together, much as laymen might think about cancer. But as there are many different types of cancer, which respond to many different treatments, so there are many different types of terrorists and terrorist organizations.

This is important, because each possesses characteristic strengths and weaknesses, and each group develops its own culture, which may have little to do with the culture of the country in which they were born or operate. Thus, the terrorist's understanding of the world can be startlingly different from our own, from those of his countrymen, and even from those of other terrorists. This worldview to a great extent defines the targets a group will select, the tactics it will use, and the penalties or rewards that may lead its members to give up violence. Methods that work when dealing with one type of terrorist, or with a particular group, may be counterproductive when dealing with another.

If we are to counter future terrorism, both government agencies and the public must understand what it is, why it works, and why it is a threat to us. Those responsible for combatting terrorism must further understand where the different types of terrorist organizations fit in a diverse spectrum of social pathologies. Effective solutions for countering terrorism will not be developed by "the one-size fits all" school of thought. Terrorism is too diverse, too complex for a simplistic approach.

The Nature of Terrorism

Despite a long history, there is no single, universally accepted definition of terrorism. For statistical and analytical purposes only, the United States government relies on a set of definitions that appears in Title 22 of the United States Code:

"Terrorism is premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine state agents, usually to influence an audience."

"International terrorism is terrorism involving citizens or territory of more than one country."

"Noncombatant" is interpreted to include "in addition to civilians, military personnel who, at the time of the incident, are unarmed and/or not on duty."

A terrorist group, finally, is defined as "any group practicing or subgroup that practices international terrorism."

The definitions above are not bad, as far as they go, but they don't go far enough. We suggest the following:

"Terrorism is the calculated use of violence or threat of violence against noncombatants to induce fear in order to coerce or intimidate governments, societies, or individuals in the furtherance of goals that are generally political, religious, social, or ideological. It is a form of psychological warfare, and its message often is aimed at a wider audience than the immediate victim. Terrorism is a set of tactics, not the ideologies the terrorists claim to serve."

All this is important, because how we define terrorism in large part governs who is responsible for combatting it. If terrorism is an act of war, the military is probably responsible, whether Defense Department establishments are targeted or not. If it is a crime, or a category of crimes, it probably falls to local civilian authorities to deter and punish those who resort to it. And under state or local laws, some acts that clearly qualify as terrorism may be impossible to punish with the severity they deserve.

One story, perhaps apocryphal, reportedly took place in a Latin American country where terrorists, seeking to intimidate and demoralize our embassy staff, caught the pet cat of an embassy officer's twelve-year-old daughter. They skinned it and nailed it to the family's front door, which they also painted with the initials of their organization. The effect, both on the girl and on other embassy families, was profound. Yet it is difficult to see how civilian authorities could have prosecuted it as anything more serious than animal cruelty, vandalism, or trespassing.

In a similar incident, a grandmotherly lady reportedly handed a note to the child of an embassy officer while the child was walking down the street. The note contained no threat; it simply welcomed the family to the country--but it bore the logo of a particularly vicious terrorist group. This, too, sent a message. It was arguably an act of terrorism. Yet no law anywhere in the country could have punished the act of handing a note to a child. Many acts by terrorists, and especially this brand of purely psychological intimidation, are simply too difficult to pin down.

Despite these and other problems, America's primary strategy for combatting terrorism has been to define specific terrorist acts as "criminal" and to use the criminal justice system to deter, capture, and punish terrorists. It has worked well when dealing with bombings, assassination, hostage taking, and other flagrant acts, but much less well when the attack is psychological rather than physical.

American Policy

Curiously, U.S. law does not directly address the issue of domestic terrorism; the definitions above, remember, are strictly for statistical purposes, and terrorist groups are defined specifically as engaging in "international" terrorism. This omission was not an oversight, but a conscious decision made in an effort to avoid jurisdictional turf battles among domestic law-enforcement agencies. As a result, virtually every state and federal agency has established its own working definition of terrorism. Those definitions reflect the statutory responsibilities, operational concerns, and organizational history of the agencies adopting them. If a particular act does not conform to a department's working definition, it may not be considered terrorism, but simply "common crime." Often, it is ignored as being someone else's problem.

Without a common definition, the agencies that deal with terrorism seldom recognize the full scope of the threat or the need for a coordinated response to it. Although the problem is less severe than in the past, this tendency continues to impede the development of effective national policies and cooperative efforts to combat terrorism.

There are other problems as well. For example, if a group restricts its activities to acts of domestic terror, U.S. law does not consider it a terrorist group at all. Yet if a single resident alien were to join in committing those same acts, the group would then be practicing international terrorism and would become a terrorist organization under the Title 22 definition. There are obvious problems with this reasoning.

Title 22 would also exclude an individual working alone, because only members of a group or conspiracy qualify as "terrorists." Similarly, the motive for the act must be political. If a radical Islamist, acting out of religious rather than political zeal, were to murder Salman Rushdie, the act would not be considered terrorism.

The problem becomes murkier yet when dealing with organized criminal enterprises, such as the Mafia or the Colombian drug cartels. Although the media have adopted the term "narco-terrorism," terrorist-style acts by the cartels would not be considered terrorism, because they are carried out for "criminal" rather than "political" purposes.

As we move from acts of violence into the gray area of threat and intimidation, the definitional problems grow. Our legal system is flexible enough so that almost any possible terrorist act can be construed as violating at least one law, and usually many. The problem is that the laws they violate may be relatively minor, even though acts such as intimidation may have a profound impact.

These problems survive largely because of a philosophical argument between two camps within the American government. One group, which could be called "strict constructionists," advocate a narrow definition of terrorism in the belief that a broader definition would dilute their efforts and make them less effective. The "loose constructionists" advocate a more inclusive definition. They argue that terrorist-style acts and psychological operations by religious, ethnic, criminal and, of course domestic "terrorist" groups all may qualify as "terrorism." They believe political motivation is not the only motivational litmus test for terrorism; failure to acknowledge the full dimensions of a threat permits it to grow. By way of example, they point to J. Edgar Hoover's repeated refusal to recognize the existence of organized crime in America, which permitted it to flourish unimpeded by the most effective law enforcement agency in the country.

This is much more than an academic squabble or semantic quibbling; it has serious consequences. Terrorism is much more than common crime, and terrorists are much more than common criminals. Terrorism strikes at the heart of a society by attacking its institutions, belief systems, and vital infrastructure. Over time, it

erodes the people's confidence that government can protect them and guarantee their constitutional rights; these are essential components of the compact between any democratic government and its citizens. To the extent that an argument over the definition of terrorism impedes the development of an organized, cooperative, and effective nation-wide counterterrorist program, it threatens both the national interest and the nation itself.

Varieties of Terrorism

For our purposes, let us assume that terrorists can act on their own or in organized groups; they can be moved by political philosophy, religious extremism, social causes, or the simple wish to avoid punishment for criminal acts; they can commit acts of bloody violence or purely psychological intimidation; and they can act domestically or across national boundaries. If we cast our nets as wide as possible, this study will capture many threats that might otherwise be overlooked.

There are many ways to classify terrorists and terrorist organizations, but for our purposes they fall into one of five overlapping categories: state-sponsored or supported, political, ethno-religious, criminal/gray area, and single-issue. Within any category, terrorist groups may differ significantly in their aims, strategies, organization, capability, and many other attributes; nevertheless, the similarities between them are more important than the differences, at least from the viewpoint of those charged with combatting terrorism.

Terrorists' motives govern their view of themselves, of their enemies and friends, and of their situation. Politically motivated terrorists, for example, tend to approach problems analytically. They see the world in ideological terms, in which certain political premises explain current conditions--as they perceive them--and dictate a course of action. It is a world of men, and of systems that are created by

men. Those systems can be fully understood and manipulated if the proper political perspective and strategies are adopted.

Religious terrorists share few of these characteristics. They see the world as both driven and riven by forces of a magnitude that men can never fully comprehend. It is the duty of men, however, to act as the agents of God and, by whatever means necessary, to ensure the triumph of good over the forces of evil.

These differences, coupled with the lessons of their cultural and organizational history, mold the terrorist's core values and "operational code," or way of doing business. They impel some terrorist groups to favor or to shun particular types of operation or courses of action.

For example, politically motivated terrorists seldom carry out operations that will inflict mass casualties (150 up) on non-combatants. Even when a political group represents a brutal ideology, it hopes to win new converts to its cause. In that light, the wholesale murder of innocents is counterproductive, because it risks alienating the uncommitted and the marginal sympathizers who might otherwise grow into hard-core support. Traditional Marxist groups are a prime example.

At the other end of the political spectrum are right wing and ultra-nationalist extremists. These groups, although politically motivated, exhibit strong ethno-religious leanings that place them outside the constraints of pure politics. Such groups often talk in mystical terms of preserving the purity of their race or culture. They appeal to Biblical authority or to the exploits of folk heroes and the myths of their culture. Condemnation simply reinforces their fervor. They, therefore, tend to be less restrained. Slaughter eliminates the undesirables and demonstrates the strength of their commitment.

Until recently, politically motivated terrorists and those with government sponsorship or support were the most numerous and dangerous. The loss of Soviet pa-

tronage has helped to reduce their activity. So has the growing ability of the United States and its allies to identify the sponsors and to retaliate for terrorist acts through military, diplomatic, or covert means.

States by their very nature are vulnerable. Their existence depends on the complex infrastructure of transportation, communications, and manufacturing needed to maintain an economic and political system. They are all exposed to bombing, sabotage, and more subtle measures that can strangle an economy or destabilize the intricate balance of political arrangements that keep a government in power.

As a result, the rogue states that once openly supported terrorism are becoming increasingly selective in the operations they sponsor. Terrorist attacks on rival nations are becoming less frequent. However, high-profile attacks against exiled opponents of terrorist regimes remain common. Most occur in Europe and the Middle East, where governments tolerate them unless one of their own citizens is caught in the crossfire or the target is so prominent that the attack embarrasses local security forces or the government. This attitude plays into terrorists' hands, as it not only permits them to murder opponents with relative impunity, but can intimidate all but the most stalwart opposition leaders.

Terrorist states have many ways to avoid responsibility for the carnage they perpetuate, and they can be expected to refine them in the years to come. In some cases, they work through a series of "cut-outs," so as to obscure the trail of responsibility. "False-flag" recruitment, in which even the terrorist himself is misled about his sponsor's identity, is an effective stratagem; if the terrorist is led to talk, he will incriminate the wrong government. Not only does this further obscure the trail, it offers the chance to embarrass or compromise a rival state or political enemy. Whatever the tactic, the goal is "plausible denial." It will be more difficult to penetrate as the rogue states grow more adept.

Today, however, another brand of terrorism has become even more dangerous than the state-sponsored groups. It grows out of ethnic and religious fervor. Ethno-religious conflict probably will be the most persistent form of political instability for the next generation. It will continue to challenge the concept of the nation-state, which already is under attack in Europe, the Middle East, and much of Africa.

Few states are immune to ethnic tension, because less than a handful of the more than 170 countries that now make up the United Nations consist of a single ethnic group. After Japan, which is not quite as homogeneous as its reputation suggests, Iceland and Portugal are the most prominent. A strong sense of ethnic identity promotes group cohesion, but when two or more ethnic groups share the same state, the effects almost always are divisive. Much of the violence in the Middle East, Africa, and the Indian subcontinent stems from the communal strife and tribal warfare built into the artificial state structures that were the legacy of the colonial powers.

Ethnic and religious terrorists vary in their attitude toward mass casualties. Where religiously motivated terrorists believe their actions are mandated by God, even the most brutal ethnic terrorists know that the slaughter of innocents may alienate political allies, and even core ethnic supporters. For the ethnic terrorist, pursuit of genocide or mass casualty operations is, in essence, a political and emotional calculus rather than a religious imperative.

Alienation of potential recruits and constituencies is accelerated when media coverage emphasizes the shared humanity of the aggressors and victims. Some of the more bloody operations carried out by the Provisional Irish Republican Army, for example, have led Protestants and Catholics to unite against the violence. Similarly, so-called "ethnic cleansing" by the Serbs in Bosnia has inspired small, much

less visible peace movements in Belgrade and among the Serbian literati. This is one reason the Milosevic regime controls the Serb media so tightly.

A new and disturbing form of terrorism stems from organized crime. Some criminal terrorist organizations have evolved into a sort of parallel government. Others have so penetrated the existing governmental structure that they have become integrated into the political system. We see this in Latin America, and in Italy where the drug cartels and Mafia remain a potent political and economic force.

Criminal cartels are acting more like nation-states. They hold summits and divide the world into spheres of influence, assisting each other in ventures that promote their political as well as economic interests. They are building power that may someday make them an undeniable force in international politics.

The Russian Mafia is a newcomer to this scene, but already a rising star. It consists of ethnically based syndicates of Russians, Chechens, Azerbaijanis, and Georgians. These groups have gained a reputation for brutality that rivals even the Colombian drug cartels. Using murder, torture, and intimidation, they have built a formidable presence in Europe and have established themselves in New York, Chicago, Miami, Detroit, Baltimore, Philadelphia, Los Angeles, and Seattle. Russian President Yeltsin has commented that 40 percent of individual private businessmen and 60 percent of all Russian companies already have been corrupted by organized crime.

The Russian syndicates, too, are joining the worldwide criminal network. Large seizures recently of Colombian cocaine suggest ties to the Latin American drug cartels, and there have been reports of meetings between the Russian and Italian mafias to coordinate the international drug trade. The syndicates have also developed a close working relationship with some members of the intelligence and law enforcement communities.

Another growing form of terrorism comes from single-issue groups, such as animal-rights extremists and violent anti-abortionists. Radical animal-rights activists are responsible for the collapse of the fur industry, which has decimated the economies of many small, isolated villages. In Great Britain, the extremists are increasingly imaginative, bold, and violent. The violence of anti-abortion extremists is even better documented. With murder, bombing, and arson, they have created an environment so volatile and intimidating that many doctors are too afraid for their lives to carry out a legal medical procedure.

Few single-issue terrorists would accept that they have much in common with the Serbs destroying Sarajevo or the Islamic extremists eager to murder Salman Rushdie. Yet in this they have much in common with the ethno-religious terrorists: God is clearly on their side, at least in their own eyes. They share, too, the key factor common to all terrorists, the willingness to commit illegal, often barbaric acts against innocent parties in order to further their goals. The single-issue terrorists differ only in their causes.

The Record Today

The accompanying graphs provide a quick overview of international terrorism today. Graph I illustrates the growth of international terrorism over almost a quarter of a century, from fewer than 200 incidents in 1968 to 427 in 1993. The sudden decline in 1989 marks the effective death of the Soviet empire, which we now know actively aided many terrorist organizations. The blip in 1991 represents an outbreak of violence during the Gulf War. Despite these occasional fluctuations, the trend is unmistakably upward. As you can see, there were more incidents in some years, fewer in others, but over the period international incidents grew at an average rate of 15 percent per year.

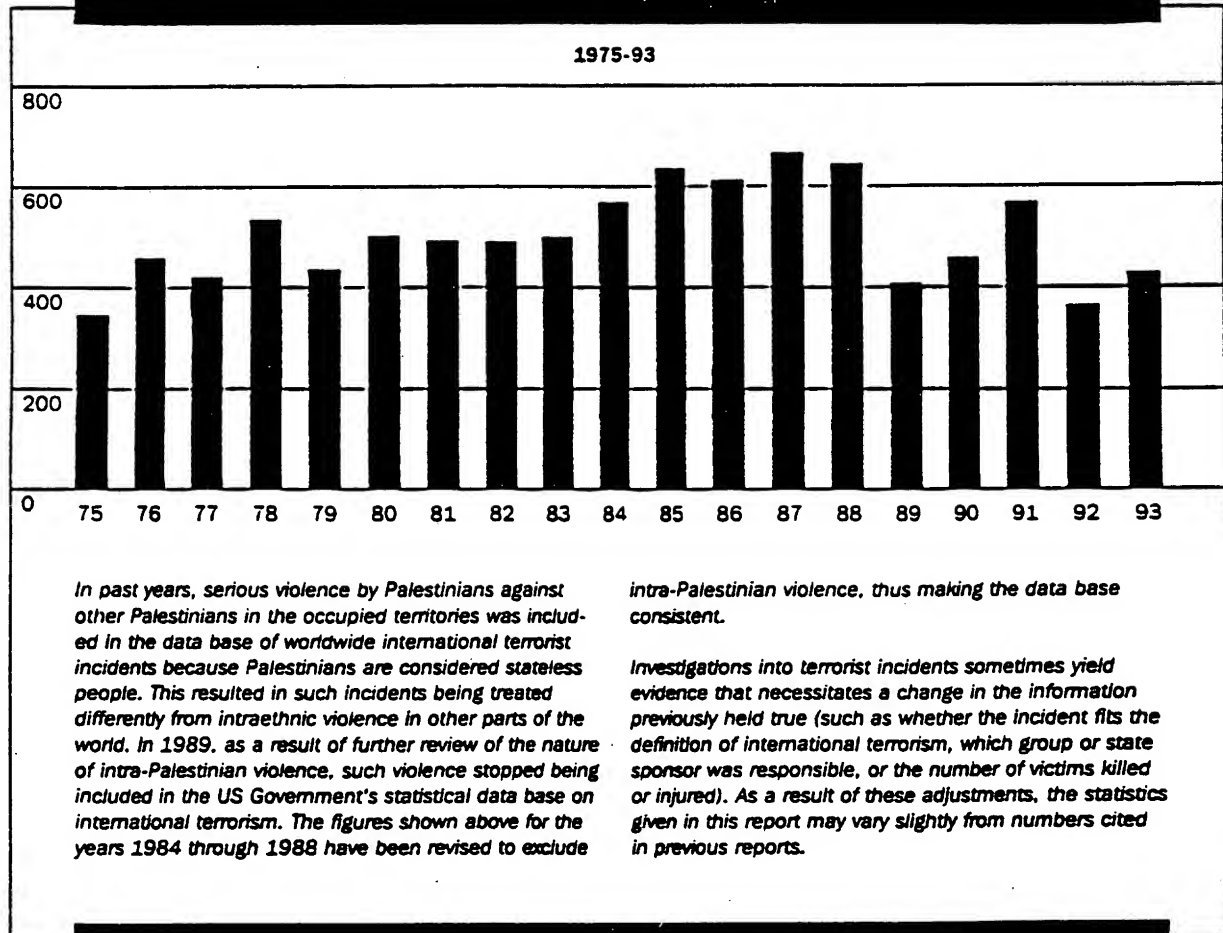
We can expect this growth to accelerate in the future, thanks in large part to the chaos following the collapse of the Soviet Union. Ethnic, religious, and political forces are redrawing the map of the former Soviet Union and Eastern Europe and recasting political alignments in the Middle East and much of Africa. We will examine these developments and their probable consequences in depth in later chapters.

The simple numbers presented in Graph I are significant--most Western governments rely on such statistics to gauge the terrorist threat--but they can prove misleading or irrelevant. More important than the number of incidents is their political and psychological impact. The dramatic downing of Pan Am Flight 103 or the bombing of the Marine barracks in Beirut had far greater consequences than the bombing of a car dealership in Bogota. Those impacts are difficult to quantify, however, and the numbers often receive too little of the rigorous analysis that can separate the significant from the superficial.

For example a sharp drop in the number of terrorist incidents does not necessarily mean that the security forces have the terrorists on the run. It may be that the terrorists believe they have mobilized enough support to pursue their goals through politics rather than violence. Or they may just be devoting their energies and resources to recruitment and training and improving their security, rather than to offensive operations. In that case, a new wave of violence probably lies ahead. Similarly, a surge in terrorist incidents may be the last gasp of a movement desperately trying to prove itself a force to be reckoned with. The bottom line is that statistics, unaccompanied by thoughtful analysis, should be viewed with suspicion.

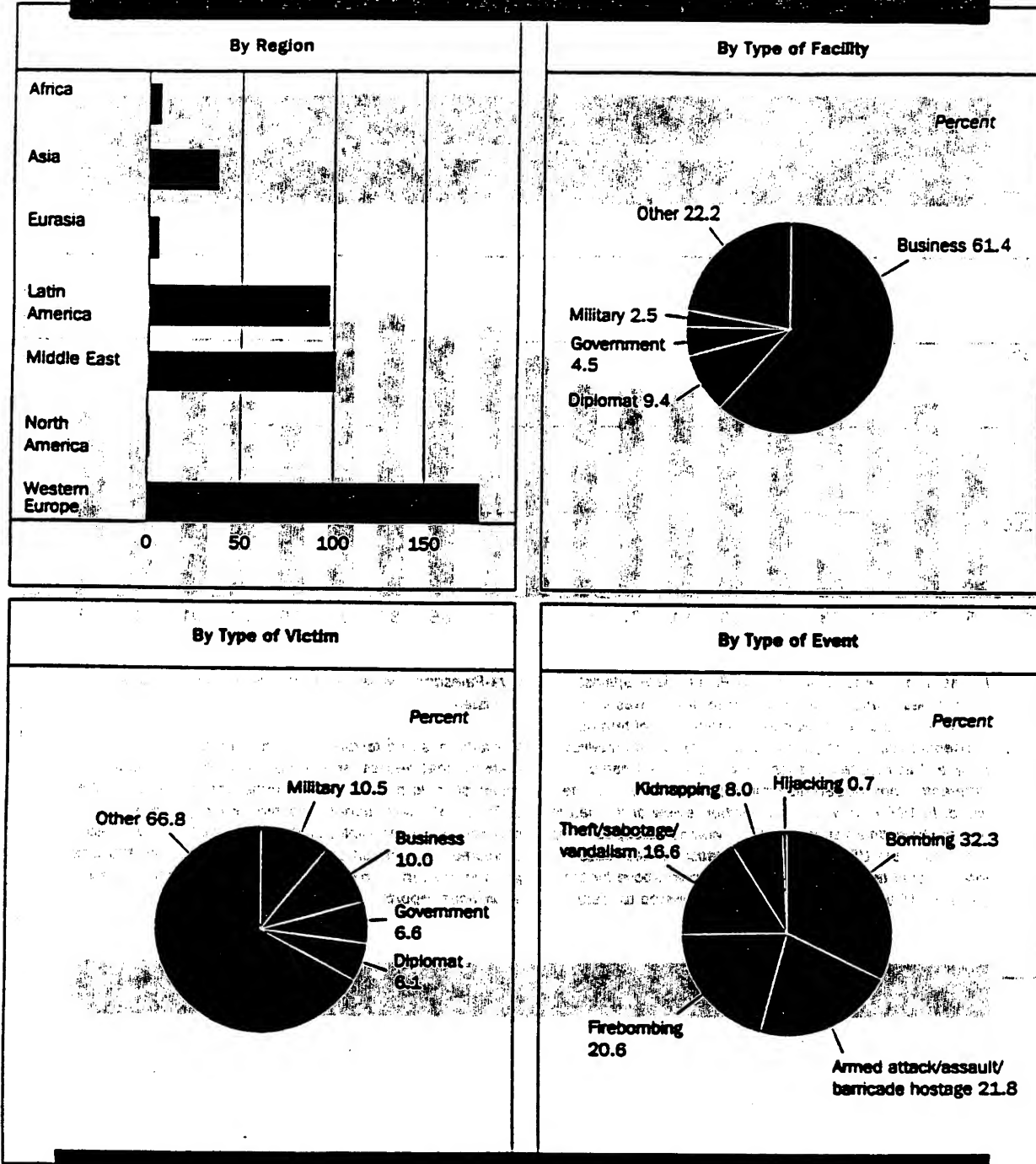
Graph II breaks down the international terrorist incidents of 1993 by region, victim, facility, and event. It reflects the most recent information now publicly available from the State Department. Well over half of the incidents are bombings,

International Terrorist Incidents Over Time



Graph I

International Terrorist Incidents, 1993



Graph II

a spectacular and convenient form of attack. Relatively few incidents involve military or government facilities, which tend to be well defended. Diplomats and diplomatic posts, however, come in for more than their share of attacks. This is because they are highly symbolic and, since they must remain open to the public, are inherently more vulnerable. Businessmen and business enterprises being still "softer" targets and ubiquitous head the target list. Graph III represents anti-U.S. attacks using the same breakout.

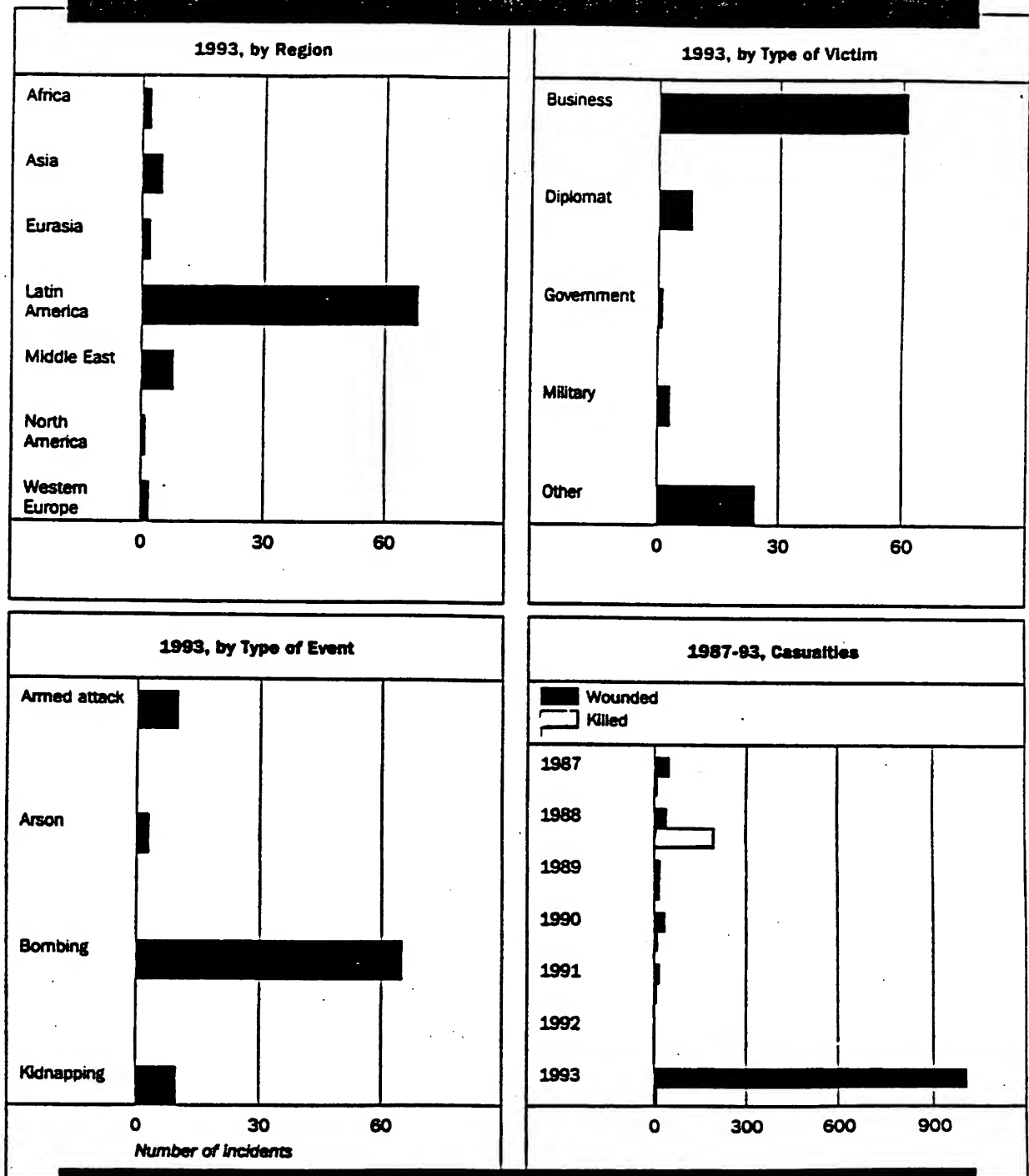
There are some surprises as well. Though Americans hear most about terrorism in the Middle East, international incidents actually are much more common in Latin America and Western Europe. To some extent, this reflects our preoccupation with Middle Eastern oil and the Arab-Israeli conflict. But terrorist attacks in the Middle East also tend to be more lethal than incidents elsewhere. Blood gains attention. By definition, this makes the terrorist of the Middle East the most successful now operating.

Threats to the United States

Middle Eastern terrorists also represent the greatest threat to America and American interests. For radical Islamists, hardline Palestinians, and states such as Iran, Iraq, and Libya, the United States is "the great Satan." (Syria may be re-evaluating its policy now that it has lost its Soviet protector.) Their hatred is grounded in our support for Israel, the Middle-East peace process, and the conservative monarchies of Morocco, Jordan, Saudi Arabia, and Kuwait.

In Latin America, Marxist terrorists and insurgents attack American interests because the United States often supports the status quo or governments that are perceived as repressive and exploitive. The drug cartels also represent a serious threat, as they plot the assassination of Americans involved in the counter-drug effort and target our embassies and diplomats.

Anti-US Attacks



Graph III

There are threats as well within our own borders. Neo-Nazi and right-wing hate groups such as the Aryan Nations have declared war--quite literally--on the United States government. Militant Islamists and radical secular Palestinian groups have built a significant, professional terrorist infrastructure here, as well as throughout much of the world. Our own single-interest groups, many of them increasingly militant, represent a growing problem.

Again, we will return to these topics in later chapters.

Defending against Terrorism

Like many afflictions, terrorism often triggers denial. This is true, both for individuals and for nations. Often, we blame the victim, thus absolving the terrorist of guilt. Often, we argue that the victim somehow invited the assault or equate their "provocative" defensive measures with the unprovoked attacks of the terrorists. Thus we deny our own vulnerability and justify our failure to support the victims of assault.

Some nations, unwilling or unable to confront the threat, have entered into secret or tacit agreements with terrorists. In return for "guarantees" that their citizens and interests will not be targeted, they permit the terrorists to operate from their territory, or at least grant them free passage of weapons and personnel. Often, the politicians responsible for these policies seem to see themselves as latter-day Bismarcks, playing the high-stakes game of realpolitik. But terrorist guarantees usually prove ephemeral, and peace bought with national honor seldom proves more than self-delusion.

In these cases, the terrorists win big. First, they can base their operations on foreign soil. Then when their "secret" dealings reach the press, their ability to wrest concessions from a sovereign state is demonstrated to the world. The fact that they sit at the table with government representatives gives terrorist organizations a legiti-

macy that they eagerly seek. At the same time, the governments are seen as having sold out to the enemy, and their leaders are perceived as cowardly and weak.

Everyone knows that there are few secrets today. That alone should discourage governments from these self-defeating deals. Somehow, it seldom does.

But official duplicity is not the only obstacle. The public often underestimates the seriousness of the threat, making it difficult to gain support for effective countermeasures. In many countries, and especially in the developing world, the public does not see terrorists as their enemies, so long as violence strikes primarily at government officials, the military, or privileged, unpopular, or controversial individuals or sectors of society. It is easier, and perhaps more satisfying, just to stand aside and allow the targets to become isolated. And as Edmund Burke wrote, "All that is necessary for the triumph of evil is that good men do nothing."

The problem is more difficult still when fighting terrorism means sticking to principle at the cost of immediate economic or political interests. A prime example is Cambodia, where the United States has supported the Khmer Rouge in its demands for a share of political power, despite the organization's long history of wanton genocide, and in our negotiations over political repression in China. The Western democracies usually treat government terror against its own citizens as a human rights issue. After all, the killings are not committed by subnational groups or by covert state agents in a foreign land; thus, they do not fit the working definition of terrorism. But many would argue that such policies represent political and economic expediency, and intellectual and moral cowardice, rather than any honorable balance of interests or values. The ultimate issue may not be how we rank our national priorities, but whether any democratic nation can regularly compromise its principles without violating the public trust and damaging the credibility of its elected leaders.

And yet there are limits to what a democracy can do, even when faced with a dire threat. Totalitarian regimes have no qualms about crushing any suggestion of opposition; most do so long before overt violence breaks out. Democracies are constrained by law, by constitutional guarantees, and by the opinions of their citizens. Responding to terrorism without violating the rights of citizens is the most difficult and troubling issue the American government and people will have to deal with.

A Baseline Future

Chaos theorists speak fondly of the so-called "butterfly effect," in which the beating of a butterfly's wing in China ultimately causes a hurricane in New York. The train of events between the cause and the effect is so complex and so exquisitely dependent on initial conditions as to be wholly unpredictable. It seems at first a good metaphor for any attempt at forecasting. No matter how sound our reasoning, some unseen impulse can theoretically overwhelm the more conspicuous forces to which prediction usually is limited. Yet in world affairs, "butterfly" events stand out precisely because they are so rare. At any given moment, the broad outlines of the present can be explained by a relatively few elements in the past, almost all of which could have been recognized, and their effects foreseen, years earlier.

Forecasting is simply the attempt to identify those elements with foresight rather than hindsight and then to project where they will lead. It is relatively difficult to predict specific occurrences; the micro level truly is the realm of the butterfly's wing. It is much more possible to foresee the environment within which they will take place, and thus to anticipate in general what kinds of event might reasonably occur in such a world. As an aid to practical planning, this macro approach offers useful insights in many situations.

In this chapter, the study contractors present their own view of a non-butterfly future, largely independent of the terrorism experts whose judgments form the substance of this report. We do so in part because this most-probable future, arrived at over more than twenty years of work, was used as a baseline in developing this study. Equally important, our expectations must inevitably color our understanding

of the data presented here. Anyone reading this report deserves both some details of its origin and fair warning of any biases the authors may suffer.

This baseline scenario has been developed from the trends presented in Appendices D and E, which in turn are condensed from much larger collections of trend data. The scenario projects these observed patterns ten to fifteen years into the future and tries to weave them into a coherent portrait of the world, accounting for the interactions between them. The result is what forecasters often call a "no-surprises" future. A major development not arising predictably from current events would invalidate it. A nuclear war between major powers, a worldwide depression, a new source of electricity "too cheap to meter," an abrupt ecological collapse: they all seem too unlikely to consider in any projection of the real world, yet any of them would change many or all of the trends now operating.

In general, we believe the period from now through 2010 or so will be a time of great and often painful contrasts. For the developed world, the next twenty years will bring relative peace and plenty, but also profound change. Nations are giving up bits and pieces of their sovereignty to build regional trading agreements and to improve global security. New technologies, new economic pressures, and new values are sweeping away lifestyles that a generation ago seemed as natural and permanent as gravity. In return, they are bringing opportunities that could not have been dreamed of until recently--though only the energetic and well educated are likely to benefit from them.

For the developing world, the prospects are more troubled and the rewards fewer. Populations are growing much faster than economies. Food is plentiful, but primitive infrastructures and political conflicts prevent it from reaching the hungry; the U.N. Food and Agriculture Organization estimates that some 500 million people remain undernourished. AIDS is ravaging the Third World. Ethnic and sectarian

conflicts increasingly divide Europe and Asia. The gap between the world's haves and have-nots is growing wider and more difficult to cross. All these trends will remain in effect as far into the twenty first century as we can see.

There is little chance that the world's major powers will go to war against each other, and the risk will decline every year. But that does not mean that we are entering an era of peace. Instead, the early 21st century will be a time of low- and mid-intensity conflicts. Terrorism is cheap, effective, and often deniable. It will be used widely in these conflicts.

Although there will be less danger of conventional or thermonuclear war, detailed knowledge of radiological, biological, and chemical weapons of mass destruction will spread rapidly, and many new players, if unable to acquire actual weapons, will still be able to improvise their own. This will provide rogue states, and even marginal terrorist groups, with disproportionate power. The world will remain a dangerous place, as many of the actors will be new and very violent. Too often, we will know little about them, their agendas, or their capabilities.

There are other trends as well, which guarantee terrorism an active role in this future. The collapse of communism, the disintegration of the Soviet Union, the proliferation of weapons of mass destruction, and the machinations of radical Islam all have destabilized the balance of power that emerged from the ashes of World War II. Thanks to these forces, politically motivated terrorism is being joined by new varieties of terrorism rooted in ethnic and religious hatred.

From Bonn to Sarajevo to Nagorno-Karabakh, we already can see what the disappearance of the Soviet Union has meant to the world. We have outlived the threat of conventional nuclear war, only to discover that the world is more vulnerable to small wars of aggression and for ethnic and sectarian violence of a kind not

seen since before World War II. In these less conventional conflicts, terrorism becomes a favorite tactic.

In fact, three competing trends are at work here. To many of the traditional terrorist groups, the loss of the Soviet Union and its satellite states has been a stunning blow. The West long suspected Moscow and its allies of encouraging international terrorism, but it is only since the fall of communism that we have begun to understand how pervasive their role was. The Soviet Union, East Germany, Bulgaria, and Poland to varying degrees financed, trained, sheltered, equipped, and otherwise supported some of the world's most vicious and effective terrorists, from Abu Nidal to the infamous "Carlos." That aid is gone now, and other sponsors have not been able to replace it completely.

At the same time, many terrorist groups that became all too familiar in the 1970s and '80s are moribund, or nearly so, for reasons that range from aggressive counterterrorist campaigns to loss of relevance and an aging leadership. To a great extent, they have been replaced by a network of larger, less formal groups supported primarily by Iran. International terrorism has declined as a result. At the peak, between 1985 and 1988, there were well over six-hundred incidents of international terrorism each year. By 1993, despite a secondary peak during the Gulf War in 1991, there were some 430 incidents, a 30 percent reduction.

Local terrorism, in contrast, has flared throughout much of the former Soviet Union and Eastern Europe, and in the West as well. Ethnic and sectarian hatreds, suppressed by the Soviet security apparatus, has reignited as virulent as they were seven or eight decades ago. They have even been joined by conflicts that could not have existed before Soviet authorities tampered with borders and relocated populations formerly too distant to fight.

In Russia itself, no fewer than 210 territorial disputes have been catalogued, most of them with strong ethnic overtones. Within and between the former Soviet republics, there have already been no fewer than seven wars, and another dozen similar conflicts appear on the verge of hostilities. In Eastern Europe, Czechoslovakia has peaceably divided itself into ethnic homelands, while what is left of Yugoslavia continues to destroy itself over hatreds that were old when this century began. In Germany, the volatile mix of economic hardship and a flood of East European refugees has promoted a rebirth of fascism and the xenophobic atrocities that go with it. Similar movements can be found throughout Europe, wherever there are large populations of refugees, "guest workers," or other cultural enclaves that can be seen as foreign and inferior. We will return to all these conflicts in later chapters.

In counterpoint to these centrifugal nationalisms, the empire-building right has also reappeared, not only in Serbia, and to a lesser extent Germany, but in Russia. There are dozens of rightwing nationalist groups in Russia. Some are simply xenophobic isolationists, clinging to fantasies that the Soviet Union collapsed due to subversion by the Central Intelligence Agency, the Vatican, the "international Jewish conspiracy," and the rest of the usual suspects. But others are unreconstructed imperialists, and long to rebuild the Russian empire as it existed before its descent into chaos. In this view, it is the natural order of things for Russians to dominate the hundred-odd ethnic groups living among them. Ukraine, Moldova, Poland, and the Baltic states are to be reconquered and reabsorbed. Many former Communists have found it expedient to fly ultra-nationalist colors, but support for these positions appears to be far broader.

Until recently, Vladimir Zhirinovsky seemed to be just one of the more unstable members of the extreme right. His stated policies include the renunciation of all treaties with the West, especially those involving disarmament; the immediate in-

vasion of the former East Germany in a kind of "nuclear saber-rattling" intended to extort food and economic aid from the West; and the recapture of such former colonies as Poland, Finland, and Alaska. But in the legislative elections of December 1993, Zhirinovsky and his so-called Liberal Democratic Party received about 25 percent of the votes and formed the single largest bloc in the new parliament. Fully half of the Russian Army is estimated to have voted for Zhirinovsky. It may make little difference that only a minority voted for an extremist candidate if that minority owns the guns.

This nationalist impulse can be seen throughout most of the world. India walks the tightrope of civil war and war with Pakistan. Pakistan, Bangladesh, Burma, Sri Lanka, and the Philippines all endure separatist insurgencies. In South Africa, both white and Zulu minorities are fighting terrorist battles to avoid rule by the Xhosa-dominated African National Congress. In Central Africa, where a single state may contain as many as three-hundred tribes, each tribe seeks its own autonomy. In the Middle East, a violent, extremist minority seeks to weld Islam into a political force capable of driving out the infidels, and someday destroying them. In North America, Quebec still threatens to secede from Canada, whose regional disputes might even further fracture. (In fact, our Futurist Advisory Board forecasts that by 2005 or so the remaining provinces of Canada will join the United States as four new states, two in the East and two in the West.) In Western Europe, Basque separatism and the "troubles" of Northern Ireland continue unabated. And so it goes. Among all these conflicts, only Quebec seems able to pursue its nationalist goals without resorting to significant terrorism.

What emerges from this is a world of loose confederations, with many small ethnic and sectarian states bound together more or less reluctantly by geography, historical ties, and economic reality (Appendix E, Trend 47). Of these, the Russian

Federation will be by far the largest and most subdivided. Already, its fifteen pre-collapse republics have split into 27 states, each claiming sovereignty, and the process has just begun. According to some estimates, the United Nations could have as many as five-hundred member states within twenty years. We believe the evolution will be slower, the final roster not so long. But by 2010, there could be three-hundred separate countries in the world.

Among these new U.N. members, the greatest number, and the most important, will have been formed by nations that once comprised the Soviet Union.

This is not a formula for tranquillity. The rivalries that subdivide these volatile regions into mini-states will not disappear simply because one country has split along rough ethnic boundaries. Many of these mini-states will not be viable. Populations will still overlap, and the grudges left after years of conflict will last far longer than the battles did. Strong central governments will be difficult to create in such tiny, divided lands, so even the smallest states may well be unstable. The sheer number of these new countries will greatly complicate international relations: the relationships between them, and their individual stability, will set the tone of the international system. Outbreaks of bickering, terrorism, and open war are inevitable. Ultimately many of these mini-states will recombine into more viable political entities and a new power balance will be established.

The best that can be said about such a future is that most terrorist conflicts will remain within the territory of the participants. Nevertheless, the "spill-over" effect will threaten the peace, and at times the stability, of neighboring states. This is particularly true where European colonialism and Great Power politics drew borders that lumped religious, tribal, or ethnic rivals into the same state or divided ethnic groups with a strong sense of identity into several artificial states.

If the world is becoming more divided politically, it is uniting itself economically (Appendix E, Trend 36). World trade is growing at about 4.5 percent per year (Appendix E, Trend 35), a rate that will continue through the 1990s and into the beginning of the next century. (Our futurists believe that to promote this trade, the world's currencies will become convertible within the next five years, and a new global banking system will be developed to handle these transactions.) This economic integration is taking place, both by formal agreements between nations and by the daily business decisions of individual corporations. The rise of the new trading blocs is the second major trend now shaping the world of 2000 and 2010.

Formal trade pacts are proliferating rapidly (Appendix E, Trend 37). The North American Free Trade Agreement will create a single market of 360 million people, worth \$6.6 trillion, the largest market in the world. Europe is in the process of forming an equivalent bloc. The 1992 agreement between the European Community and the seven-member European Free Trade Association creates a market that includes all the major trading nations on the Continent, some 380 million people with a gross domestic product of \$6 trillion, \$4.5 trillion of which comes from the EC alone (Appendix E, Trend 38). By 2000, the combined EC/EFTA also will be essentially free of economic barriers. In Latin America, there are no fewer than five small freetrade areas in various stages of completion. By 2010, they will have become at least associate members of NAFTA, a major step toward uniting the Americas into a single market. The "ASEAN Four"--Indonesia, Malaysia, the Philippines, and Thailand--have combined into their own free-trade area, a market of 338 million people with a combined GNP of \$309 billion. Australia and New Zealand have their own free-trade zone. By 2000 or so, we expect it to merge with ASEAN, scarcely raising the market's population--to 359 million--but more than doubling the gross regional product, to \$666 billion.

Informally, the world economy is uniting even more quickly and completely (Appendix D, Trend 13). In part, this is the result of the vast, interlocking production networks increasingly used by multinational corporations. About 40 percent of the parts in IBM's all-American personal computers are built overseas. Toyota now builds its Camry Coupe exclusively in the United States, but its Pacific manufacturing network is almost Byzantine. The company builds diesel engines and electrical parts in Thailand, steering linkages in Malaysia, transmissions in the Philippines and ships them throughout the Pacific for assembly into finished automobiles at factories in each local market. It is no longer realistically possible to decide exactly where many products have been manufactured. The process has become too subdivided, its components too widely distributed.

International investments show just how large this phenomenon has become. As of 1992, the most recent year for which complete figures are available, Americans owned \$26 billion worth of assets in Japan, \$28 billion in Switzerland, \$23 billion in France, \$13 billion in Mexico, and \$8.5 billion in Hong Kong. Predictably, other countries owned even larger blocks of the United States. Investors in the United Kingdom had bought American assets worth \$94 billion (a drop of nearly \$6 billion from the previous year), Japanese investors \$96 billion, Canadian investors \$39 billion, Mexican investors \$1.2 billion (up some 30 percent in a year), and Dutch investors \$61 billion. This is just the beginning.

In the long run, investments within the Pacific may turn out to be both larger and more important than those involving the United States, because they are growing far more rapidly. Throughout the 1980s, Japanese investment in Hong Kong, Korea, Singapore, and Taiwan grew by an average of 50 percent per year. In the ASEAN Four, it doubled every year. Taiwan and South Korea have been investing in their neighbors just as rapidly. All three are spending heavily to help develop

mainland China's fast-industrializing Guangdong and Fujian provinces, Taiwan through foreign intermediaries. For Taiwan, this effectively represents internal spending; we expect it to rejoin the mainland shortly after Hong Kong does, in 1997.

No market on Earth even remotely resembles that of the Pacific Rim. There are more than 1.7 billion people in the Asian trading nations, including 1.1 billion Chinese. Five out of six of them were born after World War II; they are just reaching their most productive years. And they are richer than most Americans recognize.

According to McKinsey & Co., by the end of the century about 110 million people in Western Asia will live in households with incomes of more than \$10,000. The Nomura Research Institute, in Tokyo, estimates that the region's gross product will grow by 7 percent annually through the 1990s. By 2000, 55 percent of Asian exports will go to Pacific-Rim neighbors, up from 40 percent in the late 1980s.

Growing up next to this vast, interlocking network of world trade, but not yet really part of it, are the crippled economies of Eastern Europe and the former Soviet Union. As a consequence of socialist "planning," few industries in these countries can survive in open markets. In most, capital equipment has not been replaced since the 1930s and '40s; in many, it has not even been adequately repaired. Factory workforces are bloated--in Poland, the average factory has about 400 workers, compared with 66 in the United States--while productivity is negligible. Suppliers in the former Soviet Union now demand hard currency for their materials, while customers there have cut their purchases or stopped them altogether. As a result, the Czech Republic's economy was shrinking by 3 percent per year as early as 1991 (when the nation was still part of Czechoslovakia), Hungary's by some 6 percent annually, and Poland's by nearly 9 percent. Predictably, inflation in parts of Eastern Europe reaches nearly 50 percent per year. Even mighty Germany has found that modernizing the Eastern economy is slow, difficult, and expensive.

These economic problems, joined with ingrained xenophobia, explain the resurgence of rightwing extremism and violence in Germany. Many West German wage earners resent and even hate foreign "guest workers" and the refugees from the East, who both compete for scarce jobs and overtax social programs that are considered a birth right. Even where there are no long-standing ethnic conflicts to inspire violence, localized terrorism is likely to increase in much of Eastern Europe until the new market economies are on a steady footing. If Poland is any indicator--voters there recently returned many former communists to power--stability will be a long time in coming.

That leaves the traditional Third World--Latin America, Africa, Southern Asia, and the Middle East. Like Eastern Europe, the Third World exists largely outside the growing network of international trade. Latin America, by virtue of its proximity to the North American Free Trade Zone, has at least a chance to escape the poverty endemic to the Third World. The reasons have at least as much to do with population, technology, and the environment as with traditional economics.

In the industrialized countries, the "birth dearth" has cut growth almost to nothing; the slight bump in fertility of late has done little to change the longterm trend (Appendix E, Trend 1). In the developing world, the population bomb is still exploding. (See Figure 1, which gives current populations and growth rates for key regions of the world, together with estimates for 25 years hence.) The reason, of course, combines tradition with practical necessity. In the industrialized lands, national retirement and social-security programs support workers during their post-employment years. In the Third World, there are no comparable safeguards for the aging to fall back on. What supports those too old to work is their children. And

Key Population Data and Forecasts

| Region/Country/City | 1992 Population | Growth Rate | 2017 Population | Forecast Rate |
|----------------------------|--------------------|----------------|--------------------|------------------|
| Selected Regions: | | | | |
| World | 5.4 Billion | 1.7% | 8.0 Billion | 1.5% |
| Developed Countries: | 1.2 Billion | 0.5% | 1.4 Billion | 0.35% |
| Developing Countries: | 4.2 Billion | 2.0% | 6.5 Billion | 2.5% |
| Selected Countries: | | | | |
| Africa | 654 Million | 3.0% | 1.2 Billion | 2.5% |
| China | 1.2 Billion | 1.3% | 1.5 Billion | 1.0% |
| India | 883 Million | 2.0% | 1.3 Billion | 1.0% |
| U.S. | 256 Million | 0.8% | 300 Million | 0.65% |
| Brazil | 151 Million | 1.9% | 230 Million | 1.6% |
| Japan | 124 Million | 0.3% | 130 Million | 0.2% |
| Iran | 60 Million | 3.3% | 105 Million | 3.0% |
| Mexico | 88 Million | 2.3% | 140 Million | 2.0% |
| Selected Cities: | | | | |
| Tokyo | 18.1 Million | 0.9% | 21 Million | 0.5% |
| Mexico DF | 20.2 Million | 2.9% | 32.5 Million | 2.0% |

Adapted from United Nations University Millenium Project Feasibility Study, Oct 1993.

Figure 1

because childhood mortality rates in the poorer countries have traditionally been high, the logical thing to do is have as many male children as possible, in hope that some will survive until their help is needed.

In much of the Third World, however, nutrition and medical care have improved markedly in recent years. As a result, more children are surviving. As young adults, they are discovering that their national economies have no place for them. Poor, frustrated, often over-educated and without hope of escaping the cycle of poverty, they become prime candidates for terrorist recruiters.

As populations outgrow economies, per capita gross domestic products are declining throughout the Third World. Simple poverty is seldom enough to inspire terrorism, however. What causes violence is the perception of injustice, and nothing is more easily seen as unjust than the coexistence in one country of enormous wealth alongside crushing poverty. It is a condition found throughout much of Latin Amer-

ica and the Middle East. In El Salvador, for example, the entire economy and virtually all the real estate is controlled by just fourteen families. In parts of the Middle East, the proportions are even more skewed. This is why land reform is such an explosive topic in South America and the Philippines; it will move at a glacial pace until a credible revolution threatens--and by then it may be too late.

According to the United Nations, the top economic tenth of the population in the Nordic countries earns about 2.5 times as much per year as the bottom tenth. In Britain, the figure is about six times as much; in Italy, Spain, and Portugal, it is eight times. The wealthiest tenth of Americans earn about 10.15 times as much as the poorest. Historically, countries tend to remain stable so long as their top and bottom income deciles are no further apart than about fifteen to one; beyond that, all bets are off. In Iran during the last days of the Shah, the wealthiest tenth of the population earned 38 times as much as the poorest. A revolution was easy to forecast.

In Mexico today, the figure is forty to one, one of the worst disparities we have ever seen. In any other country, revolution would have broken out long ago, but Mexico represents a special case. Here the U.S. border has acted as a safety valve for the disaffected. Yet even the most docile populations have their limits, as the Chiapas-based insurgency shows. The Zapatista National Liberation Army is formed primarily of ethnic Mayans. It may well be linked both ethnically and philosophically to some of the Guatemalan insurgent groups that have long used Chiapas as a sanctuary. The fact that their leader, "Subcomandante Marcos," negotiates as an equal with high-level Mexican representatives provides the movement with de facto recognition. Already, campesinos in the neighboring state of Oaxaca look to the Zapatistas for leadership and are organizing on the insurgents' model.

A major plank in the Zapatista platform is opposition to NAFTA. They may have a point. Although NAFTA may boost the Mexican economy, it is doubtful that

the benefits will trickle down to the poor quickly enough or in sufficient quantity to damp the passion of the rural revolutionaries. In addition, NAFTA may have unintended consequences that could further divide the rich and poor of Mexico. As genetic engineering raises crop and livestock yields and cuts agricultural costs, the American producers may be able to undercut the price of Mexican imports. This will destroy much of the rural Mexican economy. NAFTA was intended in part to help Mexico become more prosperous and stable; it may end by making it poorer and much less stable.

The economic and political effects will not be confined to Mexico, but will extend throughout Central America and much of South America as well. American executives and factories almost surely will be targeted by terrorists, because the disaffected increasingly will see NAFTA as a form of economic warfare, waged against them for the benefit of American industry and local ruling elites.

If the Mexican economy deteriorates, California and other western states will be flooded with new, mostly illegal, immigrants. Unskilled, they will be difficult to assimilate and will further strain social services that already are overtaxed. Already, more than 1.5 percent of the Mexican population enters the United States each year. As this flow becomes a torrent, nativist sentiments in the U.S. will give rise to hate groups and fringe political parties.

Growing urban problems will aggravate the situation. Decaying infrastructure, masses of unemployable immigrants, the homeless, and the exponential costs of caring for terminal AIDS victims will cause those outside the ghettos to seek ways to insulate themselves from the chaos. In response, this could inspire a new militancy among Mexican immigrants. The most resentful could turn to violent protest, including acts that fit the definition of terrorism.

Technology enters the equation because of the competitive advantage it offers the well educated, scientifically sophisticated countries (Appendix E, Trends 16 and 17). New products, new productivity, and better living conditions all flow from technology and innovation. And in these, the industrialized countries have a growing lead. The developed lands have ten times as many scientists and engineers per capita as the developing world, and the gap between their spending on research and development is widening rapidly (Appendix E, Trend 18). This gap means that the developed nations will produce more and more of the world's profitable high-technology goods, while the poorer nations remain locked into natural-resource exports and low-profit, low-tech manufacturing.

A recent Delphi poll of scientists and forecasters anticipates a remarkable flood of developments in many key technologies over the next ten to twenty years. This is especially significant, because a Delphi study is performed as two linked surveys. In the second round of questions, the respondents are given the results from the first poll and are allowed to adjust their answers after considering the opinions of their colleagues. In thousands of studies in a wide variety of fields, the consensus forecast that results from a Delphi study has proved more accurate than a simple, one-step poll.

In this case, the results (summarized in Figure 2 and presented in full in Appendix F) were both hopeful and troubling. By 2010, artificial intelligence will be used to make routine decisions in management, finance, engineering, military planning, and a host of other crucial areas; these computer programs will learn by trial and error, becoming more skilled with practice (Appendix D, Trend 10). Factories will become so automated that it takes only a few human workers to run them; as a result, manufacturing workers will drop to less than 10 percent of the American labor force. Many genetic diseases will be cured. The United States at last will operate a

manned space station. Superconductors will become available for high-performance applications, such as magnetic-levitation trains. In all these fields, the world leader will be either the United States or Japan. Out of 59 technologies examined in the study, even the European Community achieved global standing in only seven, and most of these were environmental or transportation technologies, where the scale and crowding of the Continent provide strong incentives for development. Even in the development of non-traditional food sources, for which the Third World has pressing need, the developing countries were left behind.

Thanks to technology, in the late twentieth and early twenty-first centuries, the rich get richer, while the poor starve. That neglect could begin to erode even the

1991 Delphi Study on Emerging Technologies

| Field of Major Development | Average Probability (0-1) | U.S. Market Value (Billions) | Leading Nations |
|------------------------------|---------------------------|------------------------------|------------------|
| Artificial Intelligence | .84 | 151.21 | U.S. |
| Alternative Energy | .64 | 209.90 | U.S. |
| Automated Factories | .74 | 541.80 | Japan |
| Biogenetics and Medicine | .68 | 369.20 | U.S. |
| Computer Hardware | .85 | 91.52 | U.S. |
| Environmental Control | .63 | 666.02 | E.C., U.S. Japan |
| Information Services | .58 | 352.42 | U.S. |
| Material Design | .76 | 161.42 | U.S., Japan |
| New Management | .61 | 207.00 | U.S. |
| Non-Traditional Food Sources | .65 | 159.35 | U.S., Japan |
| Organic Farming | .49 | 107.83 | U.S. |
| Space | .64 | 55.05 | U.S. |
| Transportation | .56 | 281.12 | E.C., U.S. Japan |

Adapted from a study by Dr. William E. Halal, Professor of Management, George Washington University.

Figure 2

limited stability the world is now achieving, and this too is a result of technological progress. No technology is changing faster, or has more power to change the world, than communications (Appendix E, Trends 21 and 22). By 2000, the average personal computer will have at least fifty times the power of the original IBM PC. It will be tied into a global information network capable of delivering almost instantly services from the contents of the Library of Congress to Cantonese-language pornography. By 2010, we should be nearing the day when computers can translate between major languages reliably, using speech recognition and synthesis to produce spoken output in real time. Unlike other technologies, communications will penetrate even the poorest nations. Mainland China already has country-wide television service, using satellite dishes capable of picking up programs from all over the world. The world's poor are already growing aware that the residents of richer countries live better than they do. Fifteen years from now, they will know with agonizing clarity just how deprived they really are.

In the decline of the Soviet Union and its satellite states, we have already seen the destabilizing power of modern communications. True, the communist regime spent its country into bankruptcy in the attempt to build a military that could dominate the world--or at least deter the attack it imagined the West might launch against it. True also that they were encouraged to do so by the American Star Wars program, which deliberately raised the ante beyond the Soviets' ability to pay. Nonetheless, the Soviet Union largely destroyed itself. Its economy was in shambles, the infrastructure in decay. Its central planning process bore no relationship to the needs of the country or the desires of the marketplace, while local managers often were political hacks and the labor force had no incentive to produce quality goods. Institutionalized corruption was rife. Communism had long been irrelevant. Further, virtually everyone in the country knew of all these problems and recognized that the

Party could do nothing to solve them; it was their source. The system survived as long as it did only because of the black market, a capitalistic and highly successful institution which in effect constituted a parallel economy.

In the waning days of the Socialist Poland, leader Wojciech Jaruzelski quoted an old American proverb: "Good fences make good neighbors." But in the electronic age, no fence is good enough to bar change from a country that hopes to live in the modern world. The real iron curtain around the Soviet Union had less to do with bullets and barbed wire, and more to do with information. As long as Soviet citizens never learned how much better it could be to live in a democratic, capitalist society, totalitarian government remained tolerable. But in the 1980s, the barriers to communication became porous. East Germans watched television broadcasts from West Germany. Romanians learned through the relatively open Hungarian media. Throughout Eastern Europe and the Soviet Union, ordinary people learned how the West truly lived, and the end became inevitable.

The obvious answer for totalitarian governments is not to install modern communications, but in the not-so-long run they cannot avoid it. Digital data systems simply provide too large a competitive advantage for their economic rivals (Appendix E, Trend 25). In planning a recent Delphi poll, the United Nations University found that the cost to send and receive one round of the survey was \$1000 by mail, \$4000 by fax (including the cost of the machine), and only \$20 by electronic mail. Even if we neglect the time and money to be saved by linking designers, factories, customers, and support personnel in a single network, no nation that hopes to prosper in manufacturing and trade can afford to pass this technology by.

Thus, the process that triggered the final decline of the Soviet Union could be repeated many times in the next decade or so. Already, the Chinese people have begun to learn what they are missing. So have the poor of Latin America. Africa

remains relatively cut off from the global information flow, but is already riven by tribal warfare that borders on anarchy. And in the Middle East, a cultural antipathy toward Western materialism (made immediately visible by modern communications technology), may be one factor driving the growth of radical Islam.

One more factor may both stifle economic growth and provoke hostility between the developed and developing nations. This is the environment and the broad range of ways, often poorly understood, in which human activity seems to damage it (Appendix E, Trends 14 and 15). In the United States, the Environmental Protection Agency has identified nearly 2,000 hazardous waste sites desperately in need of decontamination. In Brazil, the burning of the Amazon rain forest not only destroys a resource of incalculable worth, it contributes one-tenth of the carbon dioxide that humanity pours into the air each year. At least one-fifth of the cropland in Taiwan is now so poisoned by industrial waste that it can no longer be farmed. Throughout Eastern Europe and the former Soviet Union, massive electrical plants burn brown coal, spewing the unprocessed soot and sulfur into the air; the massive, antiquated heavy industries favored by Marxist ideology have operated for decades with no environmental safeguards at all. In 1990, European planners estimated that it will cost at least \$140 billion to clean up pollution in the former East Germany alone.

In the developing nations, the prospects are still more grim. With a few exceptions, such as wealthy, high-tech Singapore, these countries depend on their resources for survival. To date, there is no practical way to run a mining and smelting economy cleanly, or to harvest exotic tropical hardwoods without damaging the rain forest in which they grow; even the simplest pollution controls may be prohibitively expensive. To these countries, large-scale environmental damage is simply the price to be paid for a better standard of living; Western calls for pollution control and

other such luxuries appear little more than hypocrisy: the developed lands grew by exploiting the environment, but now are unwilling to let others do the same. At best, the developed lands seem insensitive to the needs of their less fortunate neighbors. Cynics looking at the environmental records of Western companies in developing lands might suggest that they just want to avoid competition from countries they might otherwise exploit.

Either way, as evidence mounts that human activities are damaging the world around us, environmentalism will be a growing concern throughout the next two decades. This new focus on global problems may be necessary, but it offers one more opportunity for conflict with the Third World, one more proof for the disaffected that the West is not their friend. In itself, it will not inspire terrorism, save from the occasional activist for whom bombing an unrepentant polluter seems the lesser evil. But where terrorism is already a problem, it could help to direct violence at American executives or business facilities.

In Mexico, this is a strong possibility. By 2010, the United States could face sharply increased terrorism, and eventually perhaps insurrection, just across the Rio Grande. This may well inspire violence and terrorism in our own major cities. American executives and factories almost surely would be targeted, as NAFTA takes the blame for continuing poverty and environmental degradation in Latin America.

The technologically advanced countries may be reluctant to accept the cost of coping with environmental problems, but there is little doubt that they can afford to do so. Japan, for example, recycles most of its solid waste, yet manages to absorb the cost without crippling its economy, or even raising the price of its goods enough to harm exports. Germany now recycles 400,000 tons of plastic annually, four times as much as was expected when the program began. To date, it can find uses for only

80,000 tons of this material, which costs \$9 per ton to recover and process. Yet by 1997, Germany expects to recycle 800,000 tons of plastic each year. As research learns more about the environmental effects of human activities, recycling and other antipollution programs will grow rapidly, and the developed nations will find ways to reduce and absorb their cost. Using those technologies to clean up the industrialized areas of Latin America could go a long way to promote peace in the region.

There are two more interlocking problems of both technology and the environment that could affect terrorism directly: energy and water. These two factors will make the Middle East both important and unstable, even if the Palestinian conflict is resolved and militant Islam proves unexpectedly benign. By the early 21st century, the demand for water in the Middle East will double, while the supply remains unchanged (Appendix E, Trend 10). At the same time, the price of oil will drop to between \$6 and \$7 per barrel, deepening the poverty found throughout the region (Appendix E, Trend 12). Hard times breed both extremism and violence, and in the Middle East the times will probably become much harder during the remainder of this decade.

Ironically, the declining cost of energy will eventually solve some of the problems it helps to cause. In December 1993, an experiment with the Princeton University Tokamak fusion reactor released 5 million watts of power for seven seconds, proof at last that nuclear fusion is on its way to becoming a practical source of electricity. Unlike today's fission reactors, fusion will be a relatively benign force. It requires no fuel that might be turned into weapons, and it cannot be made to create fissionable materials. It does not even produce radioactive waste, save for the material of the reactor itself when the generator is decommissioned. But it will eventually cut the cost of electricity to the point where desalinization becomes a practical, large scale source of water for drinking and irrigation.

This will not happen immediately. But fifteen years from now it will be clear that water scarcity will soon cease to be a problem. In the foreseeable future, the deserts of the Middle East will become fertile, and their inhabitants will have enough to drink for the first time in human memory. It should go a long way toward pacifying this troubled, and troublesome, region.

That, in broad brush, is the future as we now see it. It is a time of both progress and conflict. Terrorism will not disappear; in fact, the number and variety of causes capable of inspiring violence against noncombatants will grow quickly. By 2010, today's ethnic, political, and sectarian attacks could be joined by terrorism in service to economic and environmental goals, animal rights, and other causes that formerly would have considered violence off-limits. By the turn of the century, we may witness terrorism by religious or "new age" millenarian groups.

In a simple, straight-line projection, the number of international terrorist incidents each year will rise and fall in the decades to come, yet will grow over all at an average rate of 15 percent per year. However, because of the growing social and political instability, we expect international terrorist attacks to increase two- or three-fold over the next decade. Moreover, we expect an even greater increase in "local terrorism;" that is, terrorism that is confined to a single country and which involves only the nationals and targets of that country.

As terrorism has matured, its reach has grown. Today, the largest, most sophisticated terrorist organizations of the Middle East can reach across the world to strike at their chosen enemies. Witness the destruction of the Israeli embassy in Buenos Aires. Armenian, Sikh, and Irish terrorists all have carried out operations in the United States, Canada, and Europe. By 2000, they may be joined on the international stage by terrorists working for other causes. As we will see in later chapters, neo-fascists, radical antiabortionists, environmentalists, and animal-rights activists

are building international networks that could someday serve as infrastructures for terrorism. It is easy to imagine an attack on the New York headquarters of a company that environmental extremists held accountable for destroying part of the Amazon rain forest.

As any realistic future must, our baseline contains many unusual cases, exceptions, uncertainties, and special concerns that require individual attention. Mexico was one such. We will consider some of the others here.

Probably the most important special case is mainland China. While Russia struggles to build democracy and finds capitalism even more difficult, the People's Republic represses almost any hint of democracy, but has become a land of small entrepreneurs with the world's fastest growing economy. Where the former Soviet Union struggles to reform a misshapen industrial economy burdened with capital equipment decades obsolete, China is building largely from scratch. It concentrates, not on high technology or Soviet-style heavy industry--though both have their place--but on light-to-medium manufacturing, which produces incomes for the largest number of workers. In doing so, it creates new consumers as quickly as new products for them. This is a process that sustains itself well.

Much depends on the regime that follows the aging Deng Xiaoping. Stalinist repression could yet abort the Chinese economic miracle. But economic pragmatism seems well established on the mainland. It seems more likely that the new capitalism will flourish in the coming decades. This will weaken the ties between the more advanced southern China and the agrarian North; ultimately, it could sever them completely. However, the heavy involvement of military in China's economic miracle creates many imponderables that are beyond the scope of this study.

The question then becomes whether the government of an affluent, entrepreneurial society can remain repressive. Although many doubt it, history offers

at least one example of an extraordinarily repressive state with the most advanced technology then available. Hitler's Germany remained at the cutting edge of research and development throughout most of World War II. German scientists led the world in the development of rocketry that became the basis for our own space program, and the United States was locked in a deadly competition with the Nazi regime for the development of the first atomic bomb. It seems at least possible that China and even the former Soviet Union could repeat the German formula.

It is naive to argue, as many do, that the magic of the free market system somehow precludes the development of an authoritarian state. Singapore is perhaps the best example of how these two phenomenon not only may co-exist, but flourish.

However, today's key technology deals not with rockets but with information. Global competition today requires the efficiency of telephones, faxes, and computerized data networks. In short, it requires as free a flow of information as technology can provide. This is a condition totalitarian governments have seldom been able to survive for long. China may soon find that it can either give up its new found affluence or accept something that on the local level closely resembles democracy. Few Chinese leaders, even among the most devoted Maoists, will prefer poverty to change. By 2010, China should enjoy a level of freedom and prosperity that could not have been imagined in the days of Mao.

This has only two implications for terrorism. China will not replace the Soviet Union as a patron of international terrorists, a move that would severely limit the growth of its trade with the West. And, thanks to better communications and the potential for internal terrorism, it may find it difficult to repress demands for freedom and independence in Tibet and among the Muslim minorities who live along the border of the former Soviet Union.

Cuba, the second Marxist holdout against democracy, faces dire prospects, at least in the short run. In what is officially called the "special period"--the years since Cuba lost its Soviet patrons--the island economy has crumbled. Most food is rationed or unavailable. Paper, including toilet paper, is a receding memory. Electricity is blacked out twelve hours a day during the summer and is available at all only because Cuba has managed to buy a small stock of the cheapest, most polluting oil for its generating plants. The only effective source of hard currency is the revived tourist industry, which brings the risk of ideological contamination as well. Yet most people remain loyal to the communist government and no indication that Castro himself is anywhere near ready to abandon his ideology.

Fidel brought his people three things they had never had: universal education, lifetime medical care, and a generous social security system. Few Cubans would be willing to do without any of them, and so long as Castro can make good even minimally on his end of the social contract, there is little prospect that he will be overthrown, even by the military, which would dearly like to assume power.

Whatever changes Cuba makes will come from Castro himself or will wait until after his death. They have already begun. The U.S. dollar is now legal tender throughout the island, and many people receive hard-currency donations from relatives in Miami. And Castro has granted people in more than 135 service and retail trades permission to go into business for themselves. The rules governing these entrepreneurs are so restrictive that relatively few people actually set up shop, but the principle at least has been established. It almost inevitably will lead to broader changes later. By 2000, the Cuban economy should be stable again. By 2010, the country might well have rejoined the Western mainstream.

For terrorism, Cuba's plight has both good and bad sides. A patron of the terrorist art needs money, and Fidel is now out of the market. Like the Soviet Union's

terrorist clients, the rebel groups of South America have been forced to seek other support, and they have found little. Cuba retains its image as a friend of those who consider themselves repressed, however, and its troops won themselves a good reputation with their strong showing against American trained forces in Angola. Palestinians, radical Islamists, narco-traffickers, and the remnants of Latin American terrorist organizations with hard currency may find Cuba prepared to offer equipment and training, particularly with more advanced weapons systems. This may prolong a few of Latin America's terrorist movements, but it seems unlikely to change their ultimate outcome.

To most people in the United States, terrorism is well down the list of problems they associate with Latin America. At the top is the drug trade. But in recent years, the two have begun to converge. Colombia's Medellin cartel, under the leadership of the late Pablo Escobar, brought bombing and assassination to its war against the government. In addition, some of the traditional political terrorist movements, deprived of support from Cuba and the Soviet Union, have forged a profitable new business protecting drug laboratories and shipments; among them are Peru's Sendero Luminoso and the Revolutionary Armed Forces of Colombia. This association is destined to last well beyond the turn of the century. No government crackdown or supply-side drug policy will end it.

And yet, the United States could significantly damage the Latin drug trade with a single act. Since it is impossible to destroy drug traffickers, as experience has made clear, we must consider eliminating their market. The only way to do this is by decriminalizing the use of marijuana, cocaine, heroin, and the other drug offenses now overloading our criminal justice system.

Though such a policy change is now politically infeasible, interest in it is building quickly. Surgeon General Jocelyn Elder has suggested studying legalization.

Several former leaders of the federal Drug Enforcement Administration have made similar recommendations. Baltimore Mayor Kurt Schmoke has not quite endorsed that idea; he simply points out that supply-side antidrug laws have failed, and it is time to try something else. All but one of the members of our Futurist Advisory Board agreed.

If the United States does decriminalize drugs, it will deal a significant blow to the illegal drug trade, and in turn to those Latin terrorist groups that have become dependent on drug revenues.

This is not the final answer to Latin unrest, however. Unless manifest progress is made to resolve the problems of endemic poverty, institutionalized repression, public health, and failure to institute land reform, new revolutionary groups with fresh ideologies will rise to fill the vacuum. The cycle of history once more will repeat.

"Public Enemy Number One," Newsweek recently dubbed North Korea. It was a fair assessment. The prospect that Kim Il-Sung may soon have nuclear weapons places North Korea among the most dangerous terrorist states in the world today.

The members of our Futurist Advisory Board agreed unanimously in their view of this trouble spot:

North Korea is the one rogue state in the world that now possesses the ability to produce nuclear weapons.

Both Kim Il-Sung and his son, Kim Chong-Il, have been so completely isolated from the outside world for so many years that they no longer have a realistic view of the West's intentions or capability. Either is capable of using a nuclear arsenal to pre-empt a perceived Western threat that in reality does not exist.

If North Korea has developed nuclear weapons, it will almost surely be willing to sell them for hard currency or natural resources. (One nuclear device could easily

fetch an open market price equal to perhaps one-fifth of the country's gross national product.) Logical customers would include those to whom the North already supplies missiles: Iran and other state sponsors of terrorism.

Even if the International Atomic Energy Agency gains access to all of North Korea's atomic facilities, inspections will no longer end the threat. Pyongyang has had enough time to relocate any incriminating equipment or materials. There is little chance that limited inspections will unambiguously identify a weapons program in North Korea.

Finally, the 700,000 or so troops which North Korea has positioned on its border with the South represent, not a bluff, but an immediate, real threat to a friendly government. Kim Il-Sung is entirely capable of using them at any moment.

Based on all these considerations, all but one of the usually pacifist members of our Futurist Advisory Board came to the same conclusion. (The sole exception admitted that he had no rational basis for differing, but had been a lifelong "dove" and simply could not bring himself to change.) The United States no longer has any choice. It must eliminate Pyongyang's capacity to resist inspection and then locate and destroy any nuclear, chemical, or biological weapons program now under way in North Korea. If that is not politically possible, significant military intervention will be required.

Failure to destroy a North Korean weapons program will expose the world to one of the most dangerous threats of global nuclear terrorism we can expect to face in the next fifteen years.

Only two of the forecasters actually believed that the United States or its allies would respond effectively to this challenge. Iran represents an even greater and more immediate terrorist threat. It, too, forms a major part of terrorism's hard core. It already possesses biological and chemical weapons and is aggressively seeking a

nuclear capability. Seeing itself as the Sword of Islam, its ambitions extend well beyond its borders and the region. Its influence extends throughout North Africa, where it offers support to violent Islamic terrorists in Algeria, Tunisia, and Morocco. Iran has penetrated many of the Muslim communities in Europe, Asia, and, even in the United States, its agents seek to supplant moderate Muslim leadership with radical Islamists. This strengthens the existing terrorist infrastructures in all these lands and presents some European countries with significant internal-security problems. Iran also funds terrorist groups such as Hezbollah, which has a worldwide reach, and is developing operational ties with Hamas, factions of the Palestinian Islamic Jihad, and some of the radical Islamic groups that seek to topple Egypt's secular government. If successful, their triumph would reverberate throughout the entire Middle East and could begin a slide into radical Islamic domination of the Muslim world; it could well be irreversible.

Teheran is closely allied with theocratic extremists elsewhere. Among them are the rulers of Sudan who currently shelter some of the world's most vicious terrorist groups. Iran also has cemented close operational ties with the most radical of the fundamentalists ruling Afghanistan; they, in turn have established an ideological foothold in the predominantly Muslim republics of the former Soviet Union. An Islamist "terrorist internationale" comprised of Iran, Sudan, and Afghanistan will increasingly challenge the West, not only in the Middle East but on our own soil. For the United States, the bombing of the World Trade Center may have been only the opening salvo.

Finally, there is Russia. After a promising commitment to democracy, Boris Yeltsin defied the elected legislature--admittedly while it was attempting a putsch against him. Former communists occupy positions of authority throughout the Federation. Economic reforms nearly stalled, industrial production is down sharply,

inflation is high, unemployment is soaring, and radical nationalists have built what appears to be a strong power base in the new legislature. There are minor wars in several corners of the late Soviet Empire, and the Baltic States are restricting their Russian minorities in ways that invite Moscow's intervention. This obviously is not a formula for peace and prosperity.

This threatens the outside world in part because of the technical expertise now unemployed and hungry in Russia. Nuclear physicists, chemists, biologists, and technicians of all varieties are now jobless or nominally employed, but increasingly desperate. Too many of them worked for the Soviet weapons program. Even if nuclear weapons never leave Russia--that would require semi-official connivance, and the current guardians of Russia's arsenal were trained by the Soviet Union, which was more reluctant than the Western powers to allow nuclear weapons and technology out of its own control--these scientists and technicians could easily be recruited by a rogue state that possesses the technical facilities, money, and will to use their talents to create a terrorist threat like none the world has seen.

The rise of imperial nationalism brings other ominous possibilities. For one, the nuclear threat has spread to three more republics. Kazakhstan, Tajikistan, and Ukraine all possess respectable arsenals left behind by the death of the Soviet Union. All had stated their willingness to give up their strategic nuclear weapons. None is now likely to follow through on that commitment. Kazakhstan and Tajikistan are largely Muslim states. Tajikistan shares a porous border with Afghanistan, while Kazakhstan is separated from Iran only by the Caspian Sea. This raises concern that nuclear weapons could reach the terrorist states of the Middle East.

The next three to five years are the critical period. After that, the futurists believe the Russian political and economic situations will stabilize, firm control over nuclear weapons will be regained, and key personnel will find employment at home.

But until 1997 or so, this is a threat to be watched carefully. Our terrorist and Soviet specialists, however, are less sanguine. They foresee a prolonged period of ethnic strife and internecine warfare during which tactical nuclear weapons as well as fissile material located at weapons research centers, hospitals engaged in nuclear medicine, and certain industrial laboratories will essentially be up for grabs.

This is the world of 2000 and 2010, as we believe it will probably develop. Yet it is not a true portrait of our future. It bears much the same relationship to the coming reality as an architect's rendering of a college campus in planning or an artist's conception of a car not yet built. The one thing of which we can be absolutely certain is that some of the details will be wrong.

The possible futures discussed in the next two chapters attempt to anticipate the ways in which could differ from our baseline scenario. These "topical" scenarios are, in effect, variations on the theme, created by excerpting features of this most likely future and projecting the world they would create if allowed to dominate other concerns. None will happen in its entirety; almost certainly, the future will combine elements of each, in varying proportions. How these scenarios were developed, and where they led, are reviewed in the next chapters.

Forecasting Methodology

Because this study was the first of its kind to examine the problem of terrorism, it seems necessary to explain in some detail just how it was carried out.

Our first concern was to recruit two advisory boards, ten experts in terrorism and ten professional forecasters. These advisors helped to formulate the survey and otherwise guided this project. The members are listed in the Acknowledgment. In addition to the formal members of our advisory boards, many other widely respected specialists graciously helped with this research. They too are listed in the Acknowledgment.

At the same time, we examined previous forecasts of terrorism, mining them for insights that might otherwise be overlooked. From those works, our own, and the comments of our advisors, we derived the ten scenarios described in Appendix C.

ASSUMPTIONS

In addition, we incorporated six assumptions into each possible future. There is no guarantee that any of them will survive the 1990s, but without them, no valid forecasts are possible, because the world would have changed so radically that we could not hope to foresee the results. We assumed that:

1. There will be neither general war, nor a war involving the United States and any militarily equal state, nor a war among any other industrialized, technologically sophisticated countries. The United States, Russia, Japan, and the European Com-

munity all will continue to resolve their differences through negotiation rather than force.

2. There will be no worldwide depression or economic collapse of any of the developed countries.

3. No major scientific or technological breakthrough(s) will permit one nation to intimidate the other nations of the world.

4. There will be no energy crisis. There will be sufficient power to provide for all the world's needs.

5. Global population will continue to grow, with the largest increases taking place in the "Third World" countries.

6. The proliferation of all types of arms (including nuclear, biological, and chemical weapons) will continue, even though the total number of these "weapons of mass destruction" may be reduced significantly in developed countries.

Most of these assumptions are straight-line extrapolations of today's world. It is possible to argue with them, and no doubt many people would; it is easy to find "authorities" who are convinced that the world is headed toward economic ruin, a permanent oil shortage, or nearly any other catastrophe. However, we—and the forecasters who participated in this study--believe that each of these assumptions is not only necessary for the study, but is by far the most probable of the alternatives. Each is consistent with the trends presented in Appendix D and Appendix E.

PRELIMINARY SCENARIOS

Early in the process, the advisory boards evaluated ten preliminary scenarios designed to clarify the issues to be considered in the final survey. Each scenario emphasized a major trend or phenomenon already visible in the world today. (See Appendices D and E for the full list.) These trends were selected in part for their

apparent influence on terrorism and in part to provide a wide range of possible futures, in hope that further study would reveal any factors that might otherwise be overlooked.

The preliminary scenarios, presented in Appendix C, then were evaluated for their analytical strengths and weaknesses. Over a month of work, probabilities were discussed, details added, scenarios condensed, eliminated, or in some cases expanded. In the end, four possible futures remained for study. Those scenarios are examined at length in the next chapter.

ANALYTICAL PROCEDURE

In addition to the scenarios, the survey contained two documents designed to elicit specific information. One was the list of domestic and world trends reproduced in Appendix D. An appended questionnaire cross-referenced each trend with each scenario. For each combination of trend and scenario, readers were asked first to estimate the probability that the trend would prove important to the scenario and then to judge the effects of the trend. Probability and effects were each rated on a scale from -5 to +5, from negligible to extreme.

The second document presented a series of possible terrorist acts and targets and solicited ideas about each one. Typical threats included contamination of food, water, or medical supplies with chemical or biological weapons; disruption of telephone land lines, video broadcasts, or communications satellites, or of data networks crucial to the government, military, banking, or justice systems; assassinations; kidnappings; and deliberate environmental damage. Again, a questionnaire requested effect and probability assessments for each scenario.

The results from each form were analyzed statistically to identify the most significant trends and scenarios, with some confidence that our data were reproducible and our choices valid.

As expected, this close look revealed many weaknesses in our early scenarios. In the end, six either were eliminated or were condensed into related futures that our advisors found more likely.

In addition, the responses of our advisors made it possible to abbreviate the list of trends submitted to the full panel. It turned out that only 27 of the 124 trends merited further study – seventeen of the fifty world trends and ten of the 74 domestic trends. In addition, the advisors believed that five global trends had very direct implications for terrorism itself.

Each of these 32 final trends will critically shape the environment in which terrorism arises and operates. In sum, we can look forward to a world in which the disadvantaged have more difficult lives, more reasons to become terrorists, better weapons, more sensitive high-tech targets to attack, and on average a declining tolerance for alien views, lifestyles, and people.

The domestic and world trends selected for evaluation by our general panel are identified in Appendices D and E. The terrorism-specific trends merit reproduction here in full:

- AIDS continues to plague the world.
- The proliferation of technology and weapons will continue.
- The world's water supply will become more important in the future.
- In the industrialized countries, the "birth dearth" has cut population growth to almost nothing, while in the developing world the population bomb is still exploding.
- Among all major religions, fundamentalist sects are gaining new members and becoming more active and influential.

These observations were used to prepare a second survey, which asked a larger audience to consider the findings of the first. Each participant received a copy of the final scenarios and two questionnaires similar to those used in the original survey. Each first examined the overall scenarios, deciding which seemed most likely to represent the world of 2000 and 2010, then proceeded to the detailed questionnaires. A total of 59 experts in both terrorist studies and technological forecasting completed this final survey. Again, we subjected their individual responses to a simple statistical analysis.

The results of this study turned out to be surprisingly reproducible and uniform. We found little difference between the views of the terrorism specialists and those of our technological forecasters. This may reflect a high degree of cross-pollination between the two groups. In preparing for this study, members of our Terrorism Advisory Board read the work of prominent forecasters, while those on our Forecasting Advisory Board read the significant literature about terrorism. Whether this process increased the validity of their results or simply deprived the study of a useful diversity of viewpoints, we cannot be certain. However, although this procedure seems in retrospect slightly incestuous, we did and do believe that it was necessary, both for internal consistency and to minimize the time spent in consensus-building.

Finally, we used these results to group our proposed terrorist acts/targets into four impact probability matrices, one for each scenario. Possible terrorist incidents were categorized as high probability/high impact, high probability/low impact, low probability/high impact, and low probability/low impact. Items with high probability and impact form the core of our current report. Those with low probability but high impact -- for instance, detonation of a crude nuclear device -- we have passed on to the appropriate agencies for monitoring. These items, and those with high probability but low impact, we have also considered here for whatever light

they can shed on our future. Events in the fourth group were simply dropped from the study.

From this point onward, a subjective element unavoidably enters the study. Translating statistical data into useful recommendations requires not only sound data, but human judgment. In evaluating any potential threat, the Department of Defense considers five factors: the environment -- peace, transition to war, or war; the nature of the threat -- anything from civil disturbances through terrorism to military attack; whether the threat requires inside knowledge or access; the threat intent, from unlikely to nearly certain; and the degree of sophistication required to carry out the proposed attack. Figure 2 illustrates some of the factors that go into making this kind of evaluation. A similar process weighs the risks presented by specific terrorist groups, as illustrated in Fig. 3. Individually, most of these factors are difficult or impossible to quantify. As a group, they form such a dense network of interactions that only experience can sort them out.

In addition, many forecasters volunteered ideas that did not fit within the rigid structure of our questionnaires. These included new issues that may inspire terrorism, potential terrorist targets, new methods of attack, and many similar items. These ideas were forwarded to other members of the group for comment. Many were rejected as being too implausible. Others were accepted as potentially important. A few were rejected by most terrorism experts, yet won approval among the forecasters. Ideas generally believed to have at least some merit will be included where appropriate in our discussion. This does not necessarily mean that we or the participants found them likely either to take place or to have a significant effect. They simply deserve consideration by a wider audience.

Future Scenarios

As Chapter 4 described, this study involved four plausible scenarios, each of which may well reflect some critical aspect of reality early in the next century. Each represents a distinct, self-contained, consistent future. Each could evolve from the world we see today, if current trends grow to dominate our lives. In the end, reality probably will mix portions of each into a single future even messier than our study cases.

ECONOMICS DOMINATE

In the first scenario, the world is dominated by regional trade blocs and run largely to promote corporate profits. National security has become defined primarily in economic terms. American scientists and engineers who once labored to create weapons now develop commercial products. Arms races are limited to Third-World regimes that either harbor designs upon bordering territory or feel the need to defend against their neighbors. In a world of terrorism, brush fire wars, and all the levels of violence in between, the American public still sees the military as the guardian of the nation; yet the armed forces no longer seem quite as important as they once did.

There are five major trading blocs: the European Community has absorbed the European Free Trade Association, and the most prosperous of the former East Block countries enjoy associate-member status in the resulting market. Trade within the Continent has blossomed. Credit goes in part to the lowering of trade barriers, but the creation of uniform product standards has proved even more important.

The North American Free Trade Association has been vindicated. The United States did lose about 20,000 jobs to Mexico in the first year of the pact's existence; three years later, it had gained some 400,000 manufacturing and service positions directly related to the growing trade with Mexico. Canada had a longer, more difficult transition, largely as a result of American protectionism, but it too has prospered under the agreement.

For both northern countries, agriculture has been a major winner. Mexico now dominates the markets for citrus fruit, flowers, and peanuts. In return, it buys huge quantities of corn, wheat, soybeans, beef, vegetables, and other key farm products. On balance, the United States alone earns \$5 billion per year from its agricultural trade with Mexico. Canada also runs a strong positive balance on its farm trade.

In South America, the local trade pacts formed in the early 1990s have united into a single bloc covering the continent. In a move that hints at a possible hemispheric union, Mexico has recently joined the South American Free Trade Association as well as NAFTA. Though trade between these countries is growing rapidly, it has had little effect on the lives of most citizens. In most countries, the proceeds funnel to fewer than a dozen enormously rich families, which control both industry and government.

Japan, Korea, Taiwan, and Hong Kong -- technically part of mainland China, but in effect almost independent -- have formed a similar association. It is an uneasy alliance. Korea and the two China remember the horrors of World War II; they will never fully trust Japan. Further, Tokyo still off loads its obsolescent manufacturing industries onto its trading partners while keeping profitable high-tech enterprises for itself. This technological colonialism is a continuing source of friction. Nonetheless, Japan has maintained economic leadership in the world by trading with its

neighbors, and all three industrialized nations have built a profitable trade with the fast-developing provinces of China.

The fifth bloc combines the Association of Southeast Asian Nations -- the most important members are the so-called "ASEAN Four:" Indonesia, Malaysia, the Philippines, and Thailand -- with Australia, New Zealand, and their one-time enemy, Vietnam. These countries are fast moving from agricultural to information-based economies, skipping as best they can the heavy manufacturing typical of an earlier age. Because Japan and its allies dominate international markets, these countries find it difficult to grow as quickly as their older cousins once did. Yet it would be harder still if not for the regional markets secured by their trade pact.

The two Pacific Rim alliances overlap considerably, thanks to investment from Japan, Korea, and Hong Kong in the ASEAN Four and in the two most industrialized provinces of mainland China, Fujian and Guangdong. Together, they represent a market of more than 2 billion people. All are hungry for consumer and capital goods of all kinds. Since the early 1990s, the Pacific Rim's GDP has been expanding at some 7 percent per year, the fastest growth rate in the world.

If this future sounds like a Reaganite vision of Paradise, it is not. Even between the great trading blocs, tensions often run high. Many old arguments remain unsettled, while other issues have risen to join them.

Though Europe once swore that it would not obstruct foreign competition within the Community, it has done just that. Japanese cars have been virtually banned from Europe, while restrictions on computers, consumer electronics, and other high technology products still irritate competing trade blocs.

Japan maintains the barriers that keep most American products out of the island market. Ford, GM, and Chrysler have finally noticed that Japanese drivers need their steering wheels on the right, but America still sells few automobiles in Japan.

IBM and Apple are the only American electronics firms with more than a toehold on the Japanese market, and their share of computer sales is dropping. And Japan's market for resource and communications satellites is filled almost exclusively at home.

The United States itself talks free trade and practices something less. Under pressure from Canada and Mexico, it has largely stopped using local-content rules and other regulations to block the products of its NAFTA partners. However, Europe remains banned from U.S. financial markets, and Japanese products are at last facing serious trade restrictions.

These arguments are causes for tit-for-tat tariffs, not for war. However, South America's poor feel left out of the economic miracle brought by free trade, and they blame the United States for their hardship. Genetic engineering of crops and livestock soon could make matters worse by allowing U.S. farmers to under price those of less advanced agricultural industries. This would undermine economies throughout Latin America and could inspire terrorist attacks on U.S. interests.

There are new sources of violence as well. Some originates with the more ruthless multinational corporations. Practices include corporate spying, sabotage, and even murder, to block research programs, scramble financial records, and intimidate competitors. Ecoterrorism, too, has prospered in the 1990s. Environmental extremists, despairing of legal techniques for influencing national policies, have taken to destroying earth-moving equipment, dynamiting construction sites in wilderness areas, and sending letter bombs to officials blamed for environmentally-objectionable decisions. Animal rights activists, religious extremists, and simple bigots all have grown to depend on terrorism to promote their positions.

Bickering among the world's "haves" is mirrored by violence among the "have-nots." The vast African population remains largely outside the international trading

structure. So does the Muslim world, save as a source of oil. The poor of these regions, like those of South America, bitterly resent the prosperity of the developed and developing world, which they see as being built largely on their resources. This frustration, combined with tribalism and explosive population pressure, triggers incessant border wars and tribal skirmishes throughout Africa. Radical Islam threatens Jihad against the corrupt and unjustly rich west. In Latin America, the Left agitates for land, jobs, and social programs to aid the poor. And growing numbers of petty dictators are deciding that the riches they cannot earn in the international marketplace, they will simply take, through wholesale corruption or by seizing mineral-rich territory from their neighbors.

Terrorist incidents remain a nuisance, rather than a threat to any nation's sovereignty or to the world's stability in general. As always, they vary from one year to the next, more incidents when international or regional tensions are high, fewer when the world seems relatively at ease. Yet on average there are about 15 percent more international terrorist incidents each year, an over-all growth rate that has been maintained for more than a decade. About one-third are linked to the radical Islamist movement. Local terrorism has risen at even a faster rate.

Socially, two trends are competing for the Western soul. A continuing move to privatize health care, education, and other government functions has created a Darwinian struggle between haves and have-nots, even within the developed world. In American suburbs and in wealthy urban neighborhoods, the affluent hide behind steel doors and bullet-proof windows, while the inner-city poor grow ever more desperate. The political left calls for more social spending, to ease the plight of the poor, while the right demands ever more harsh punishment for growing numbers of petty criminals. Because the two sides are more or less balanced, nothing very effective gets done. The growing random violence is difficult to recognize as terror-

ism, because it remains unorganized and the criminals seldom claim their work as political acts; yet the message is clear.

Weighing against the ideological approach is a change in the intellectual foundation of government policy. Traditionally, social theorists have taken their ideas from physics and computer science. (Witness the endless attempts of economists to keep monetary and financial systems in line by tampering with interest rates and other mechanistic "inputs.") This is being replaced with an ecological perspective adapted from the life sciences. Increasingly, society is seen as a complex, often fragile network that requires subtle nurturing to remain stable and productive. If this view prevails, the social safety net may at last receive thoughtful, non-ideological analysis and repair. In that case, the stresses that still plague the world could ease in the years to come.

In all, this future of intense economic competition will be far from utopian. Yet it could make the world a safer, more comfortable place for much of its population.

VIOLENCE DOMINATES

The second scenario is a nightmarish future of national fragmentation, ethnic strife, and terrorist Jihad spawned by radical Islamic extremism. In too many ways, it resembles the world we see developing today. It is run, to the extent that it is governed at all, by an archaic international system that was designed largely to pick up the pieces after World War II. Neither the United Nations nor the Western powers can intercede effectively to control the chaos growing throughout the developing world. No more stable arrangement is in the offing.

In Eastern Europe and much of Asia, the end of the Cold War and the decline of the Soviet Union has unleashed age-old ethnic hatreds that were effectively suppressed during seventy years of Socialist rule. The conflict in the former Yugoslavia

still simmers, the continuing war in Bosnia spilling over into Albania as the Serbs tighten their control over the ethnic enclave of Kosovo.

The former Soviet Union is even more chaotic. Within a year after the Soviet government collapsed, virtually all of the republics declared sovereignty. So did many of the ethnic enclaves within them. The political and military battles touched off then have yet to be resolved. In many areas, communal violence, riots, terrorism, and open warfare are rampant. In Armenia and Azerbaijan, in Moldova, in Georgia, and in Tadzhikistan, protracted ethnic warfare seems impossible to control. Throughout the Muslim republics, terrorist movements inspired by Iran, and often supported by Teheran, struggle to establish radical Islamic regimes. Before the new century is a decade old, they probably will succeed.

In China, we see a similar pattern. As central control wanes, feudal warlords fight among themselves, and they all do battle with troops from Beijing. Hong Kong has declared its independence, the industrial centers of Guangdong are poised to join it, and what is left of the Communist government is over-extended and unable to respond. The Muslim populations along the border of the former Soviet Union are in revolt, and Tibet is waging a terrorist war against the failing regime; all seem on the verge of regaining independence. Communism has proved to be just another dynasty and is quickly following the Ming and the Han into history.

Throughout the developing world, small, poor nations prey on their neighbors, taking by force the mines and farm lands that offer their only hope of wealth. Faced with potential threats on all sides, many developing countries spend needed resources on weapons meant for defense, but equally suitable for aggression. As a result, brush fire wars are becoming bloodier.

Western Europe too is plagued by violence, much of it from the far right. The continuing influx of refugees from Eastern Europe, the former Soviet Union, and

the Middle East has spread and intensified the backlash first seen in Germany during the 1990s. Neo-fascist movements in France, Italy, and even England -- any country with a large population of refugees or "guest workers" -- stage riots, burn immigrant homes, and beat or murder those who appear foreign.

The most systematic terrorism arises in the Middle East. The fragile peace between Israel and the Palestine Liberation Organization survives, but terrorist groups have escalated the campaign of violence. Hamas, Hezbollah, and the Popular Front for the Liberation of Palestine - General Command have been joined by new terrorist organizations even more shadowy in their membership and activities. Bombings and assassinations strike, not only at Israel itself, but at its allies in the United States and Europe.

More is at stake than the survival of the Jewish state. Radical Islamists have once more taken up the sword against the infidel, and that includes anyone who in their eyes is not a devout Muslim. These fundamentalist extremists believe that the world's political and economic systems are an abomination and materialism an affront to Allah. Western influence must be purged, first from Muslim lands and ultimately from the world.

The process is well under way. The Islamic secularist movement of the 1980s and early '90s has been silenced, its theoreticians murdered or driven into hiding. Jordan and Algeria already are governed by regimes modeled on that of Iran. Egypt and Saudi Arabia seem destined for radical fundamentalist rule. At that point, there appears to be nothing to stop the Islamist revolution from sweeping the Muslim lands.

Once that is accomplished, eight to ten--and perhaps more--militant Islamic nation-states may well unite to eradicate Western culture, a Jihad which they believe the West is too corrupt to resist. Many have stockpiled chemical and biological

weapons, and one or two are nuclear powers. And they control virtually all of the world's oil outside the United States, Mexico, Russia and Nigeria.

The radicals have cause for optimism. In this future, the West in general, and the United States in particular, appear fragile. American leaders advocate a strong program of welfare and social investment, but it is unclear where they will find the tax money to support it. The national debt continues to mount, despite highly publicized efforts to reign it in. So does the balance-of-trade deficit. So does the number of people living in poverty. So do crime rates. American education still gets a failing grade.

In sheer numbers, the American military should be able to crush any aggressor. However, the nation's attention has turned inward, to fighting violent crime, intercepting drugs, and building an increasingly pervasive "internal security" apparatus. Isolationist Administrations have shunned entangling alliances and United Nations peace-keeping operations. It has been nearly a generation since the military has been tested in a major battle. They have never developed techniques that can deter or counter terrorism on the scale contemplated by the Islamic states

This isolationism is the rule throughout the industrialized world. As early as 1992, Europe could not muster the will to stop the war in Bosnia, virtually on its doorstep. It has proved no more venturesome since then. Japan was hardly willing to make international security commitments during its most prosperous days; now that its economic growth has slowed, it clings even more tightly to its convenient pacifism. No one is prepared for terrorist Jihad.

The task is made even more difficult by the growth of Muslim immigrant communities throughout the West. In much of Europe, refugees and "guest workers" from the Middle East have made up the largest non-European population blocs since the 1990s. In the United States and Canada, Islam has surpassed Judaism as the

largest non-Christian faith. A large majority of these people are peaceful immigrants from regimes as hostile to them as to the West. Yet a small, dangerous minority have been building an infrastructure of violence since the 1980s, when Iran and the most important terrorist groups began to recruit agents in Europe and the Americas. The process gained an enormous boost during the Afghanistan war, when moderate, secular governments throughout the Middle East shipped their fundamentalists off to fight and die. The survivors, now trained and battle-tested, form a loose network. Their numbers are unknown, but their fanaticism and capacity for violence present the countries they target with a significant security threat.

This is a world of ethnic conflict, not far removed from our own. In the Balkans, Muslims, Croats, and Serbs remain at each other's throats, as they have been for centuries. Throughout the former Soviet Union, neighbors do battle at levels from terrorism to open war. In India and Pakistan, Sikhs, Hindus, and Muslims continue their long animosities. But most causes remain localized, and so does the violence they inspire. The United States has relatively little to fear from them, save when it is seen to support the governments that terrorists seek to overthrow. In most cases, only U.S. installations and personnel in unstable countries are at risk. Radical Islam remains a menace to American interests the world over — but in this it is an exception to the rule.

STATUS QUO

The third scenario portrays a world that has scarcely changed. War still troubles the world of the early 21st century, but the threat of a nuclear exchange between superpowers has vanished. In its place, we have the guarantee of running battles among ethnic rivals and brush fire wars between Third-World despots, their bordering nations, and the self-styled "freedom fighters" who seek to replace old tyrannies with new. In the 1990s, some of these minor countries already are developing

chemical, biological, and even nuclear weapons, together with the means to deliver them over ranges of up to several hundred miles. Lesser nations are already entering a conventional arms race, trying to build their strength so that no neighbor dare attack them. The process will not end in the next fifteen years.

In this future, standing armies still have their place, even for the great powers. The demand for American peacekeepers in Somalia was only the first of many such requests. However, the United States now makes such commitments only sparingly, when national interests are at stake and the American people support intervention. And it remains only for limited periods, leaving on schedule, whether or not the U.N. has found replacement troops to extend the occupation. Despite protests to the contrary, the United States will act as the world's policeman, breaking up fights when necessary. But it will require others to become the social workers who repair the underlying causes of hostility.

Though trade does not dominate this future as it did our first scenario, the world is fast breaking up into the same giant trading blocs:

The European Community is well on its way to effective unity. By the end of the century, most of its remaining internal trade barriers will have fallen.

North America has the opportunity -- almost literally golden -- to build a single open market nearly as large as that of Europe. And so it will. NAFTA is just the first step in a process by which most of North and South America will reduce or eliminate most of their trade restrictions.

Southeast Asia and the Pacific are linking hands as well. Australia and New Zealand have already formed their own tiny trading bloc, and commerce between them is growing fast. The ASEAN nations are building some of the fastest-growing economies in the world and will soon turn their attention from mutual security to international trade. Soon the two groups will form one barrier-free market.

Finally, Japan is creating a 21st-century edition of its pre-war Greater East Asia Co-Prosperity Sphere. Investing heavily in Korea, Taiwan, and the industrializing provinces of mainland China, Japan is buying both low-cost sources of supply and vast new markets for its goods. On a smaller scale, both Korea and Taiwan have followed Japan's lead (Taiwan through covert intermediaries), sending capital to China. And all are buying access to the ASEAN countries, Vietnam, and the region's less developed lands. Within five years, the Pacific Rim will be inextricably bound by trade. In ten to fifteen years, it will form a single economy.

The real effect of these alliances is as much political as economic. In securing new markets, and the jobs that go with them, countries are giving up much of the sovereignty once considered part of statehood. In this, the European Community leads the trend. Though Britain and Germany are hanging back -- the U.K. out of ingrained Toryism, Germany in fear that its partners lack monetary discipline -- there is no way to maintain wholly separate banking systems while allowing trade and capital to flow unimpeded throughout the Continent. Economic unity requires a centralized banking policy, and a central bank. Despite the exchange crisis of 1993, or perhaps because of it, a European central banking system will govern monetary policy throughout the EC by 2005 or so. A unified foreign policy will follow not long after. This is a path that, willingly or not, the other trading blocs also will follow.

This vast, interlocking structure of increasingly wealthy nations leaves out much of the world's population. Throughout Africa, the Middle East, the pre-industrialized nations of Asia, and much of the former Soviet Union, the poor can see the wealth of others, yet never share in it. In South America, where a handful of families monopolize economic and political power, the injustice is even closer to home.

Simmering discontent breeds local terrorism throughout these regions. Iran and other sponsors manipulate these small colleagues almost at will.

In the 1990s, famine and war have caused the greatest migrations in history. From Africa, Eastern Europe, and Asia, Western Europe finds itself invaded by the world's poor. By 2000, the right-wing backlash first seen in Germany has won political influence throughout Europe. Even in the United States, where violence from the right once had been stamped out, immigrants are coming under attack.

There may be even greater threats than terrorism, but it is not clear how they will play out. Throughout the Third World, small, unstable countries are developing weapons of mass destruction. By 2005, chemical and biological agents have become commonplace. India, Pakistan, and North Korea have nuclear weapons and medium-range missiles to deliver them. At least six other small countries either have nuclear devices or can produce them at need.

For the industrialized lands, arms-control monitoring has become the first line of defense, though remote-sensing satellites and seismic bomb-test detectors seem a fragile shield against devastation by minor tyrants. Behind these passive defenses, the United States and its allies maintain special-operations forces potent enough to destroy any potential threat from a small country. So far, no Third-World leader since Saddam Hussein has been daring enough to test their resolve.

In sum, there are hazards aplenty in the world after the Cold War. Yet none is quite so threatening as the fear of global nuclear destruction that menaced the world for some forty years. Despite the spread of terrorism, the United States is safer, more secure, and more prosperous than it has been in at least two generations.

ENVIRONMENT DOMINATES

"We have met the enemy, and he is us," as Pogo once said. Throughout the world, environmental problems have been building faster each year. By 2005, it is clear that they will soon dominate most other human concerns.

The list of ecological disasters, both threatened and present, is staggering:

In the United States, the Ogallala aquifer, which supports life in the Great Plains, is beginning to run dry. The only other possible source of water for the region is to import vast quantities uphill from Arkansas, Missouri, and South Dakota, a distance of some 1100 miles, at a projected cost upwards of \$25 billion. But the alternative is to lose agricultural crops worth more than \$20 billion per year.

California's fertile San Joaquin Valley is facing even more severe problems. The vast population of Los Angeles is beginning to compete for the imported water without which this region would be nearly desert. Worse yet, decades of irrigation have deposited mineral salts so heavily in the soil that crop yields are falling. Soon only genetically tailored plants will be able to survive.

In Africa, Asia, and Latin America, croplands are turning to desert. If nothing interrupts the current trend, Africa will lose at least forty percent of its fertile acreage, Asia one-third, and Latin America one-fifth. Food production in these areas already is dropping rapidly. No one is sure what is causing this disastrous change, but global warming seems to bear at least partial blame.

By 2005, most of the industrialized world has run out of space in its landfills. Japan and the European Community lead the transition toward recycling, but fully disposable packaging has almost disappeared from the United States as well.

Throughout Africa, AIDS is rampant, decimating the elites and, thereby, contributing to instability. In many lands, it is the leading cause of death, both among

adults in their child-bearing years--who leave growing numbers of orphans behind them--and among children under ten, who are born with the disease.

Life is disappearing from the world at an alarming rate. As recently as 1990, biologists estimated that one species was lost each day, largely as a result of clearing in the Amazon river basin and other rain forests. A decade later, the rate is probably closer to two species per day.

In response to these and too many other problems, the industrialized nations are churning out treaties to limit pollution and clean up existing contaminants. To the ozone agreements of 1987 and 1989 and the World Climate Treaty of 1992, they have added pacts covering more than one-hundred specific contaminants of the air and water, recycling agreements, controls on the international shipment of garbage, industrial waste-treatment standards, a ban on ocean dumping--nearly a dozen major protocols in all. Most are only beginning to take effect, however, and it still is not clear that they ever will be fully implemented.

In the developing world, intellectual leaders recognize all this as necessary. Many political and economic leaders, however, view the ecology movement as a Western plot to deprive them of the wealth and comfort brought by industry. This is one more blow to the increasingly bitter relationship between rich and poor lands. To the extent that the wealthy nations face a terrorist threat, it springs from this source.

Compared with all these problems, military dangers seem less important. Throughout the West, armed forces are being recycled as environmental defense resources. Armies spend much of their time planting trees and cleaning up hazardous waste sites, often of their own making. The United States devotes less than half as much of its GNP to real defense spending as it did only two decades ago.

Specialized environmental "armies" are also springing up around the world. Young Americans now must spend two years with the National Service Corps, a specialized version of the Peace Corps dedicated to solving the world's environmental problems. Similar organizations are forming in most of the industrialized countries.

All this represents a change in the world order even more fundamental than the end of the Cold War. Philosophically, we have begun to accept the intricate dependence that binds the living world together. Nation-states are ceding power to regional associations dedicated to saving the environment. This has brought a new emphasis on international cooperation, managing disagreements, and avoiding conflict.

We can also see in this the beginnings of a new altruism born out of enlightened self-interest. Computers, information and communication systems, biotechnology, and medicine are all developing at an unprecedented rate. Increasingly, both scientists and policy makers appear determined that this rapid progress will bring, not only commercial profits, but a real improvement in living standards throughout the world.

This new concern for cooperation and the human condition has created progress in formerly difficult areas. Until recently, governments have viewed international law as little more than a diplomatic tool for impeding or punishing rival states; now an authoritative legal framework is emerging. Human rights standards are also gaining acceptance; so that states find it more difficult to repress their citizens. And when it is necessary to settle an argument through military force, the decision almost always is made by the United Nations or a regional equivalent.

Terrorism has not yet disappeared from the world, but its threat to the major powers seems to be waning. Murder, bombings, arson, and kidnapping are part of the chaotic ethnic and religious animosities unleashed by the end of the Cold War.

To a surprising degree, the world has learned to live with them. And the smaller, poorer states that once hated the United States and its allies now seem to accept that our priorities have changed. In working both to save the environment and to improve global standards for living, the West has finally understood the demands of its less fortunate neighbors. Most people in the developing world seem willing to set aside their old anger and work for the common good.

Targets and Tactics

In this chapter, we arrive both at the results of our study and at the ultimate justification for applying the methods of technological forecasting to the threat of terrorism. Making firm predictions about any aspect of terrorism—its level, locations, nature, or targets—is extremely difficult. There are just too many variables to be dealt with. Yet this is a task the intelligence community faces every day. And, in fact, specialists in this field often can predict with some degree of confidence which causes or events likely will inspire terrorism and what types of target probably will be attacked—but only one or two years into the future. Beyond that limited range, conventional analyses lose their effectiveness. In contrast, forecasting deals in relative generalities, but over much longer periods. The result is a kind of snapshot in time, but of a subject that is slightly out of focus. Forecasting, for example, cannot predict that the United States embassy in Bogota will be bombed in 1999. It can suggest that if certain observed trends continue, or if events change them in certain ways, American installations and personnel in some specific Latin American countries will be at greater risk. Intelligence specialists can then monitor those trends for an early warning of possible trouble. This further extends their analytical range. As the forecast date approaches, they can refine their assessments using more conventional methods, and the process repeats itself.

At any range, the problem of forecasting becomes even more difficult as the boundaries of terrorism itself shift and blur. Until recently, terrorism could be defined conveniently as violence carried out against noncombatants to influence the

attitudes or policies of some larger audience; it was political lobbying carried out with guns and bombs.

Today, the motives for terrorism are changing. Religious and ethnic extremists have adopted these tactics, not only political organizations. The phenomenon becomes more complex when the targets are humanitarian operations or military personnel assigned to the United Nations for essentially noncombatant peace-keeping operations. And recent events further compound the problems of analysis. In Bosnia, rape and murder have been adopted as military tactics. In Haiti and in certain Latin America countries, governments perpetrate or condone acts that if committed by revolutionaries would be condemned as terrorism. In Colombia and Italy, criminal gangs use terrorist methods to intimidate governments for fundamentally economic purposes. None of these developments fits the traditional view of terrorism.

At this point, there is no generally accepted definition of terrorism; developing a consensus definition is a pressing, but difficult priority. Ideally, the definition should grow from objective analysis. In the real world, the task of choosing a working definition may instead become a matter of political horse-trading. This process carries its own risks, which will be explored further in Chapter 8.

FUTURE TERRORISM

No single target or act of terrorism ranks high in both probability and impact in all of our hypothetical futures. Even within most scenarios, few maintain their rank from the 1990s through the first decade of the next century. Clearly, this is a time of rapid change. Yet one fact stands out: In most of our scenarios, our technological forecasters believed that terrorism should be on the decline. (It may be worth noting that specialists in combatting terrorism were less convinced than forecasters that their profession is in danger of obsolescence.) Even when violence dominates the immediate future, the variety of high-probability, high-impact events drops

sharply after the turn of the century. So does the raw number of terrorist events, according to the forecasters who participated in the survey. In their view, almost any change is likely to reduce either the underlying causes of terrorism or the world's vulnerability to attack. Thus, both the variety and number of terrorist incidents predicted by the survey rise significantly after the year 2000 only in the status-quo future, where there is no effective effort to reduce global tensions, to improve the lot of the poor, or even to harden potential targets.

The Economics Dominates Future

In the survey's most probable future, in which economics dominates other global forces, industrial and financial facilities predictably are most at risk. For the remainder of the 1990s, three forms of attack were rated as having both high probability and high impact: physical attack on a firm that offers electronic data-processing services, physical attack on a major stock exchange or on the Securities Exchange Commission; and a credible hoax involving the threat of an improvised nuclear weapon or dispersal device. In the first decade of the new century, a disruption of banking communications joins the list. One low-impact item also becomes highly probable after the year 2000: hijacking.

In addition, our participants believed that many potential threats, though unlikely, would have a sufficiently high impact to justify monitoring them. These included disruption of satellite communications, seizure of a communications system, attacks at a main power station or a substation on the grid, disruption of transportation, an attack on imported energy sources at a port or other choke point, use of chemical or biological weapons to contaminate food or water supplies, and the use of a functional nuclear bomb or contamination device.

As might be expected, terrorist acts in this scenario primarily cause economic disruption. It is a future with many potential high-impact targets, but relatively few

that also suffer a high risk of attack. Terrorism appears to be a continuing problem. In large part, this is because the world's poor are likely to remain poor, but in an increasingly information-rich world they will be even less isolated from the knowledge that others are far wealthier. This is a source of bitterness and potential violence that the world would do well to address more effectively. In addition, a small but growing number of terrorist-style incidents will arise from corporate competition. This may well account for many of the anticipated attacks on electronic data-processing firms.

In its early years, the "information superhighway" proposed by the Clinton Administration could be an ideal target for terrorism: highly centralized, expensive, probably fragile, and increasingly important to the American economy and to national communications. As the system develops further, it should become as robust as today's packet-switched networks. Multiple communications lines and automatic rerouting of interrupted calls will make it far more difficult to disable. Individual nodes of the network will remain vulnerable, but with impact limited to the immediate users.

The Violence Dominates Future

High-probability/high-impact attacks were plentiful in "Violence Dominates," which ranked second on the list of possible North American futures and third for the rest of the world. Between 1994 and 2000, no fewer than nine types of incident examined by the survey were found to justify extreme vigilance: destruction of facilities, including military bases and stations and religious shrines; kidnapping of elected officials and nationally known clergy; general anarchy (the kind of chaos that struck the United States during the Vietnam War, but with more sophisticated weaponry); attacks on judges or criminal-justice computer systems; and hoaxes involving simulated nuclear weapons. Less likely events, but ones which would have

a high impact, include attacks on sporting events, chemical or biological attacks such as contamination of food or water supplies, kidnapping of a nationally known scientist, physical attacks on stock exchanges or computer service suppliers, attacks on court houses, the use of a working nuclear weapon, or disruption of communications satellites or banking communications systems.

Yet even in this turbulent world, the situation changes dramatically after 2000. Only a nuclear hoax and the destruction of facilities--now mass gatherings such as ceremonies and sporting events, rather than more traditional, better protected targets--still seem both highly probable and likely to have a great impact. The reasons are clear: There are fewer military bases in the United States and even fewer American bases overseas; the remaining bases are easier to defend and have been hardened against attack. Judges and juries in high-publicity cases--and especially in trials related to terrorism--are hidden from public view, their names kept secret, and evidence is given on videotape, in secured surroundings. Critical computer and communications systems are redundant to avoid disruption or loss of data in the event of attack.

In short, in this scenario, terrorism has become so rampant in the 1990s that by the turn of the century most lucrative targets are well defended; even when skilled professionals attack, they have little chance of success. In this future, security is so tight at mass gatherings, that the threat--possibly fraudulent--of random nuclear, biological, or chemical assault are the only high-visibility incidents that remain practical.

Status Quo Future

In the status-quo future--third on the list for North America but second for the rest of the world--only a nuclear hoax combines high impact with high probability in the next few years. By 2000 or so, it is joined by disruption of data communica-

tions and biological or chemical attacks, such as the contamination of food or water supplies. For the near term, bio/chemical contamination and disruption of data communications remain relatively unlikely, though still high in impact. During both periods, several other varieties of terrorist incident, though relatively improbable, bear watching: physical attacks on a major stock exchange or the Securities Exchange Commission, communications disruptions of all types, the use of a working nuclear weapon, and hijacking.

The Environment Dominates Future

In the environmentally-dominated scenario, the least probable future for both North America and the rest of the world in the early 21st century, almost is devoid of high-probability/high impact terrorist incidents. Only generic kidnappings seemed highly probable, and by the turn of the century, society will have learned to deal with them, sharply reducing their impact. Attacks on long-distance power lines can also be expected throughout the study period, but they will have little impact. In the second half of the period, terrorists may attempt to disrupt military communications, but these systems will be so well defended that any attack should have little effect. Finally, a variety of incidents seem relatively improbable, but would have a high impact if they occurred. Among these are the deliberate triggering of an ecological disaster, such as an oil spill or toxic-chemical leak similar to that which occurred in Bhopal, India; disruption of telephone land lines; and, after 2000, when landfills have all but disappeared, the dumping of toxic waste to cause maximum damage.

Kidnappings stem from two sources in a future ruled by ecological concerns. Environmental extremists are likely to kidnap judges who rule against their causes and the executives of corporations with environmental policies the activists find unacceptable. With luck, this will turn out to be a short-term problem. As society

becomes more accustomed to eco-terrorism, it will decide that "life goes on," despite such incidents. (Precedent for this can already be seen in Israel and its occupied territories, where violence from both Palestinian and Jewish extremists is not being permitted to derail the peace process.) A sufficiently high level of kidnapping will create intense public pressure on government to "do something" about the problem; this will raise the probability of capture and the severity of punishment so high that even such a high-visibility technique is no longer worth the risk, save for religiously motivated terrorists, for whom survival often is not an issue.

Technology also will make this particular crime far more difficult. Already private security firms are equipping cars with satellite tracking systems, cellular telephones, and radio-operated ignition cut-offs. When a theft or panic alarm is received, they can locate a stolen or hijacked automobile within several hundred yards, call the driver for confirmation of trouble and, if a coded password is not given, remotely halt the car at a point designated by the authorities. Similarly, individuals who are likely targets of kidnappers may have small beacons implanted under the skin so they can be tracked by satellite. A combination of technology, an aroused public and a concerned government will cause kidnappings to drop sharply by the end of the century.

A growing problem will be attacks on the military, most likely attempts to disrupt communications systems. These will grow from our own past sins: the toxic waste, unexploded shells, and other contamination left on military bases after decades of use. Clean up will take decades, a delay far longer than most extreme environmental activists will be willing to accept. Terrorist attacks are one way to energize the process. However, because military targets will be difficult to disrupt, and many back-up systems will be in place, few of these efforts will have more than nuisance value.

One high-impact activity that seems unlikely in this scenario is deliberate environmental damage, such as the destruction of Kuwait's oil fields at the end of the Gulf War. However, the possibility of credible environmental threats cannot be discounted. Already, an intruder crashed a station wagon through a chain-link fence at the power station at Three Mile Island and disappeared into the compound for several hours. In this case the intruder was unarmed, but he might well have been carrying explosives capable of damaging the plant and releasing radiation. Even a simulated attack on an atomic power station, if sufficiently credible, could create significant disruption. It almost certainly would win new converts to the antinuclear cause.

TERRORIST WEAPONS

In a lecture at the Fifth Annual DoD Worldwide Combatting Terrorism Conference, held in June 1993, Dr. Robert Kupperman of the Center for Strategic and International Studies at George Washington University, sketched his view of the high-technology terrorism that could be visited on the United States in any of the scenarios outlined in the previous chapter. "The types of terrorism we may face go beyond bombings, airplane hijacking, or hostage-taking," he warned. "State-sponsored terrorists can acquire and possess far more sophisticated tools (radiological, biological, and chemical weapons). They are able to resolve complex logistical and communications problems (e.g., timed or multiphase fused explosive charges believed to have been used in the Pan Am 103 bombing, portable satellite links for secure communications and "terror television"), and have technical expertise for attacks on critical infrastructural nodes: computer networks, transportation, and energy grids. Current efforts by government and industry to protect these vital components of our society do not begin to meet the emerging challenges." That warning will remain valid, no matter which scenario comes closest to describing the world

a decade from now. And it is not just state-sponsored terrorists who will have access to sophisticated weaponry and support materials.

To date, the world's terrorists have proven remarkably conservative in their choice of weapons. Worldwide, more than 70 percent of terrorist attacks are bombings or shootings. Hijackings and kidnappings, though high in visibility and impact, remain comparatively rare. Even those terrorist groups equipped with rocket-propelled grenades and SA-7 surface-to-air missiles continue to rely on small arms and automatic weapons in their attacks. This preference is easy to understand: Bombs and guns are compact, easy to produce or acquire, and easy to use. Few terrorist organizations are capable of manufacturing sophisticated bombs--bombs with timing devices that employ integrated circuitry. The Provisional Irish Republican Army, the military branch of Spain's Euzkadi ta Askatasuna (ETA-M), Hezbollah, and the Popular Front for the Liberation of Palestine--General Command virtually exhaust the list. Yet many terrorist groups are capable of devastating their targets, or at least obtaining invaluable publicity, with even crude explosive devices. Nonetheless, there are already indications that some terrorist organizations would like to upgrade such support materials as communications and night vision equipment. Better weapons may not be far behind. The members of the two advisory boards were divided about the likely effect of new terrorist weapons. Terrorism specialists tended to believe that bombs and bullets will remain the weapons of choice. The forecasters were more open to the possibility of new developments.

Ironically, the most important new weapon may not be a gun or bomb, but the minicam. As always, the politically inspired terrorist's goal is not so much mass destruction as perception management. And for the most part, the only evidence of most terrorist incidents has been a few grainy photographs, a battered corpse, or the wreckage of a building or airliner. In the future, horrified civilians will get to watch

every step in a terrorist plot: the ambush being laid, the bomb being built and planted, the terrorist's finger on the detonator. Most significant terrorist events in the world will be captured on videotape. CNN and other networks will certainly air the footage.

There is precedent already. When Abu Nidal was at his most active, he once called in a news crew from CNN to tell them of his plans; when the events actually occurred, there was little doubt who had carried them out. When a member of the Red Brigades informed on his colleagues, the terrorist organization murdered his brother, videotaped the proceedings, and sent copies of the footage to the informer and to a local television station. At this point, no one doubts the power of television: It is unlikely the United States would have entered Somalia or involved itself with Bosnia if not for public outrage generated by on-air news coverage. These techniques are too useful not to be adopted wholesale, now that small, inexpensive, high quality video cameras are available. The information war is upon us.

Some time ago, California gave the nation what may have been another foretaste of events to come in the 1990s. While driving along a major artery at rush hour, four cars stopped, bringing traffic behind them to a halt. Their drivers got out and were driven off by another car. Behind them, a dump truck stopped and dumped its load in the middle of the road. Its driver was picked up by a motorcycle and made an easy escape. Then the group called local authorities to inform them that the mass now blocking their highway was radioactive. It took hours for a clean-up crew to make its way through the snarled traffic and to determine that the reading of radioactivity they obtained came from a few harmless trace elements that had been mixed into the load. In the 1990s, readily available radio-active material could put an area off limits for decades. And rather than being dropped on a highway, they could be

introduced into the ventilation system of a government installation, a major office complex, or an indoor sports arena.

In most scenarios, a majority of study participants believed that a genuine nuclear threat--as opposed to a nuclear hoax that would cause dramatic, but short-lived chaos--was a relatively remote hazard. A nuclear explosion certainly would be. But dispersing radiological materials is, by comparison, such a simple task that it seems to await only the terrorist with the will to do it. In some of our possible futures, that terrorist could well appear.

Biological and chemical weapons fall into the same category. Botulin toxin has already been found in a Red Army Faction safe house in France. In 1975, Viennese authorities caught German entrepreneurs trying to sell nerve gas to Palestinian terrorists. The Palestinians might as easily have made their own. Chemical feedstocks for the simpler neurological agents are readily available, and the synthetic processes are within reach of a bright, motivated high-school chemistry student. Culturing botulism is almost equally easy, at least for a microbiologist. Again, most observers believe that access to biological or chemical weapons requires state sponsorship. Again, such an assumption is unwarranted.

In itself, none of this amounts to an outright prediction of radiological, biological, or chemical attacks to come. Many terrorist groups lack even that minimum of technological sophistication required to manufacture these weapons, and although most state sponsors of terrorism could supply them with biological or chemical agents, they are unlikely to do so. Furthermore, the availability of a weapon does not automatically generate the will to use it. Traditional political terrorists have been conservative, at least in the tactical arena. Their goal is to mold public policy and mass opinion without alienating potential support. Mass murder, in their view, is counterproductive. Religious and ethnically motivated terrorists, in contrast, have a

different perspective. Their aim is not to influence governments but to destroy those who do not share their convictions. They harbor few constraints. Operations that result in mass casualties testify to the power of their belief in their aberrant creed.

REGION BY REGION

The members of our Futurist Advisory Board volunteered a wide variety of comments about the probable future of terrorism in many specific regions and countries. Though these insights could not be subjected to the statistical analysis applied to the study's formal data, similar comments have often provided useful insights in technological forecasting. We believe these may provide a similar service in this context.

The Middle East

In the Middle East, we face a period in which terrorist activity may well be intense. Hamas, Hezbollah, the Popular Front for the Liberation of Palestine--General Command, the Abu Nidal Organization, and perhaps others will escalate their efforts to abort the nascent peace accord between Israel and the Palestine Liberation Organization. So will radical Jewish extremists, and particularly those living in the occupied territories. In the worst of all possible worlds, a government hostile to the peace process could blow up a prominent mosque and fix blame for the attack on Jewish extremists in a manner so that militant Islamists receive the opprobrium.

Despite the Hebron massacre, a combination of factors will reduce area tensions within three to five years. One is the reluctant acceptance that peace is a fait accompli. By then, too, it will be clear that in Western eyes the Palestinians have finally earned the right to the aid that most residents of other developing lands can expect. Western investment will be raising the standard of living throughout Palestinian territory. In addition, the United Nations should be well on the way to com-

pleting the fresh-water canal from Turkey through Syria, Jordan, the occupied territories, and Israel, that was first proposed before the 1967 war. All these factors will improve the standard of living throughout the region, easing the desperation that ordinarily is presumed to inspire terrorism. At the same time, the growth of trade between Jews and Palestinians, and between Israel and its neighbors, will serve as a strong disincentive to violent conflict in this region.

Finally, and perhaps most importantly, the Palestinians will have a powerful interest in making their land stable, prosperous, and peaceful. They know who their terrorists and terrorist sympathizers are, and their police force once established, will arrest or otherwise discourage any brethren who reject peace, using methods the Israeli government has never been able to employ. It will be a generation before a crop of potential new terrorists arrives on the scene. By then, it will be too late. Peace will be well established. However, to realize such a peace and for peace to endure, Palestinians must see rapid economic progress and tangible improvements in housing, health, education and their quality of life. In the absence of rapid tangible results, radical groups such as Hamas will exploit frustrations, reignite conflict, and destroy the more moderate secular Palestinian leadership creating in its stead a militant, radical, theocratic Palestinian state on the borders of a much truncated Israel.

The Arab-Israeli dispute is only one source of violence in the Middle East, however. Prospects appear less optimistic for the region's other fundamental conflict, the battle between radical Islamic fundamentalism and what amounts to the rest of human civilization. This destabilizing force may well cause a rising tide of violence throughout the Islamic world and beyond. Its aims will be to replace secular governments with extremist regimes modeled on that of Teheran and, simultaneously, to drive Western culture and influence from the region. Already,

fundamentalist extremist activities have caused severe dislocations in the tourist-based economies of Egypt, Morocco, and to a lesser extent Tunisia. These successes will inspire future terrorism. The extremist campaign may well be successful. According to the Forecasters Advisory Board, by 2010 or so, as many as fifteen countries of the Islamic world could live under radical fundamentalist regimes.

What this will mean for the United States is not yet clear. Some terrorist organizations--such as factions of the Algerian Islamic Salvation Front, Hamas, and the Palestinian Islamic Jihad--are expanding their overseas infrastructures and will export their violence to other regions, primarily Europe and Africa. However, state-sponsored terrorism appears, in general, to be in decline. While Middle Eastern sponsors may sanction an occasional attack against Western interests, and particularly against those of the U.S., these events will be increasingly rare and will occur only when vital interests are at stake and the government believes it can successfully conceal its involvement.

Europe

Even without terrorist attacks emanating from the Middle East, the Continent faces a turbulent future, according to our forecasters. Traditional sources of violence will be joined--have already been joined--by the renewal of conflicts that most had long relegated to the pages of history. Basque, Irish, and Kurdish terrorists will remain active so long as their nationalist aspirations remain frustrated-- and satisfying them would likely galvanize terrorists and potential terrorists of the opposition.

The current conflict in the Balkans will undoubtedly inspire nationalist movements among the surviving Muslims of Bosnia, the Albanians of Kosovo, and the Serbs of Krajina. Terrorism is a logical weapon for these groups, and perhaps the only weapon available. Serb threats to destroy urban targets in Europe if NATO

intervened in the Bosnian war probably made the West even more reluctant to enter the conflict. There is no reason to hope that these battles will be resolved within the period now under study.

Right-wing terrorism will be a continuing source of violence as well, for so long as large populations of refugees and "guest workers" remain in Germany and the other countries now home to growing neo-fascist movements. This may decline after 2000 or so as refugees from the Balkan war return home and guest workers either become assimilated or return to their homelands. Unfortunately, assimilation seems the less likely option.

Throughout this period, some violence can be expected from the left as well. The decline of communism in Europe, and of its Soviet sponsors, has done much to quell this terrorist movement. Remnants of the notorious Red Army Faction are still active; this organization will remain dangerous until its last members are captured. In Greece and Turkey, left-wing terrorism is a serious problem, and will remain one throughout the foreseeable future. The situation in Turkey is especially chaotic, with leftist, foreign, and Islamic-extremist forces all competing for dominance and the powerful, violent Kurdish separatists pursuing the goal of an independent state. All of these movements seem likely to persist well into the next decade.

The general course of the former Soviet Union is clear; the details are anything but. Scarcely a republic or "autonomous region" is without its ethnic or political conflict capable of generating terrorism, and often several such causes compete, each fighting for control of its tiny native territory against all the others, and the central government as well. Ethnic struggles abound. Radical nationalists seek to dominate their neighbors. Neo-communists fight for control of their former empire. The situation is so complex that--were it not for the continuing presence of nuclear weapons throughout much of this region--observers could be forgiven for throwing

up their hands and declaring, "Let God sort it out!" For the moment, there seems little more that the West can do.

Africa

South of the Sahara, this continent will remain troubled. Sub-national violence, largely based on tribal and ethnic rivalries, is a growing problem throughout much of the region. Terrorist incidents can be expected to proliferate accordingly. As authoritarian governments fall, these episodes will become more difficult to contain because successor regimes lack the security infrastructure and experience to deal with them.

(It may be difficult to identify them as terrorism, however. This region in particular has a long history of small-scale violence that can be defined as terrorism or not, almost at the whim of the observer. Is a "necklacing," for example, simple murder, or is it politically inspired violence aimed at a larger audience?)

Several specific cases stand out:

Until effective action is taken to quell the situation, the violence in Somalia will continue. At its current rate of progress, two years from now, it could well have escalated to the level seen before the United Nations intervened. There also is evidence that radical Islamic terrorism has spread to this land: in November 1993, an American civilian working with the United Nations died in an incident for which Hezbollah claimed the credit. Once Western aid workers are no longer available for attack, the violence here will return to its familiar pattern of small-scale warfare between political rivals and generalized gang activity.

Sudan has already joined Iran and Libya as a host and supporter of radical Islamic terrorism in other countries. Hezbollah, in particular, seems to have found a haven there. As other sponsor nations try to distance themselves from terrorism, or at least hide their continuing support for it, Sudan will become increasingly im-

portant in this arena. Its targets and methods will be those traditionally associated with militant Islam: devastating bombings of targets symbolically associated with the United States and the West, together with specific assassinations of perceived enemies.

Iran and Libya have established strong terrorist infrastructures in sub-Saharan Africa. These deniable assets will see increasing use in attacks on U.S. and Western interests. Targets and tactics will be the familiar ones: dramatic bombings of symbolic military and civilian facilities designed to cause as much destruction as possible. The level of violence may well escalate, however, as these rogue states and their terrorist allies gain access to more sophisticated and deadly weapons.

In South Africa, right-wing violence may well spread and intensify, aimed at creating a white homeland similar to the black enclaves. This is likely to be a more sophisticated brand of terrorism than we have seen in this troubled land. White supremacists will primarily target government facilities, police stations, prominent officials, and other clearly political targets.

This should be endurable in itself, but it does risk a backlash against whites among the much larger black population. When majority rule came to Rhodesia, now Zimbabwe, nearly one-third of the white population fled, most to South Africa. The end of apartheid could trigger an even larger exodus in the event of large-scale terrorism. And a running battle between the races could destroy the national economy and discourage foreign investment for years to come.

Conflict between the African National Congress and the Inkatha Freedom Party could be an even greater, more enduring problem. The pattern here seems well established. We will continue to see largely random violence, with no obvious central control and little thought of political impact beyond the immediate area.

By 2000, however, or shortly thereafter, the post-apartheid regime should be sufficiently well established that violence should begin to decline. Whatever accommodations are needed to ensure a workable peace will have been made.

Asia and the Subcontinent

The cauldron of terrorism in the East will continue to be the Indian subcontinent. The conflicts among Muslim, Sikh and Hindu, Tamil and Sinhalese, all will simmer and boil as far into the future as can be foreseen. However, these are mostly local hostilities. There is little reason for them to strike at American interests unless some future U.S. action is interpreted as supporting one side against the other.

In Japan, both the left and the nationalist right are capable of mounting limited terrorist campaigns, as the left has often demonstrated. This conflict is primarily an internal problem, however. There is little reason to expect any substantial threat to Western interests.

Latin America

For many years, terrorism from the Middle East has captured American attention, but it is in Latin America that terrorism is most active against U.S. interests. According to the State Department, there were only some 15 incidents of anti-American terrorism in all the vast distance from the Near East to India in 1993, the most recent year for which detailed figures are yet available. In Latin America, there were 97. No fewer than 68 of these incidents were directed at American interests. Latin American terrorism represents the single greatest challenge for any American government concerned with protecting its citizens against traditional politically-inspired terrorism as well as criminally motivated terroristic violence.

As this century draws to a close and a new one approaches, this may be about to change. With the decline of the Soviet Union and the resulting bankruptcy of

Cuba, South American terrorist movements have lost most of their traditional support. Many have also lost their ideological reason for being. The electoral defeat of the Sandinistas in Nicaragua and the capture of Abimael Guzman, leader of Peru's Shining Path guerrillas, have also discouraged South America's left. For practical reasons, undeterred by their failing ideology, many Latin American terrorist organizations have entered the drug trade. In Colombia, terrorists whose interests once were largely political now guard cocaine laboratories and poppy fields. In Bolivia, they are recruiting coca farmers to build a paramilitary force capable of defending against government counter drug forces and their American advisers. Among the terrorist groups now joining or cooperating with drug cartels are some of the most effective on the continent: the Shining Path, Colombia's National Liberation Army, and the Revolutionary Armed Forces of Colombia. While providing a much needed source of income, this involvement may introduce further ideological corruption into these organizations, reducing both their commitment to their original causes and their distaste for things American.

Future Face of Terrorism

"Clutching a little case, he walks out briskly to infect a city whose terrible future may have just arrived." - W.H. Auden "Gare du Midi"

In the past six chapters, we have learned a good deal about terrorism, the people who use it, and the forces now spreading fear more broadly through the world. Before considering how to meet this threat most effectively, we should draw these many diverse lessons together into one coherent picture of the violent future we now face.

As Madison Avenue might put it, this is not your father's terrorism. In the past, terrorists have been ruthless opportunists, using a bloody, but relatively narrow, range of weapons to further clear political ends. The next fifteen years may well be the age of superterrorism, when terrorists gain access to weapons of mass destruction and show a new willingness to use them.

Tomorrow's most dangerous terrorists will be motivated, not by an urge to further a political ideology but by fierce ethnic and religious hatreds. Their goal will not be political control, but rather the utter destruction of their chosen enemies. Biological and chemical weapons and improvised nuclear devices are ideal for their purpose.

Increasingly, they will be joined by another variety of terrorist: criminals with the goal of maximizing profit, minimizing risk, and protecting their enterprises by intimidating or co-opting government officials. We have already seen their brand of terrorism in Colombia and Italy, but criminal terrorism has not yet been fully accepted as a legitimate target for counterterrorist forces. We use these assets

against narcoterrorists, for example, but still argue we are diverting specialized resources to aid the "war on drugs." Before the 1990s are over, we will be forced to recognize that it is the method, not the motive, that makes a terrorist. When terroristic acts by criminals terrorize the public for all intents and purposes we are dealing with terrorism, and to treat it as anything else is intellectual sophistry.

Alongside all these developments, the traditional brand of international terrorism, seeking power through the violent intimidation of noncombatants, will continue to grow at its accustomed global rate of about 15 percent per year. Instability bred by the proliferation of the more violent religious and ethnic terrorist groups, coupled with an almost exponential growth of mini-states in the former Soviet Union and Eastern Europe, could produce a two to three fold increase in international terrorist incidents by the turn of the century.

Technology in particular has made terrorism more attractive to dissident groups and rogue states. In the high-tech global village that the world is fast becoming, modern telecommunications provides near real-time coverage of terrorist attacks, whether in Beirut, Buenos Aires, Khartoum, or New York. As terrorism expert Brian Jenkins has noted, terrorism is theater, and terrorists can now play to a global audience. As we move into the 21st century, new and even more powerful communications links will give terrorism still greater power and appeal.

Superterrorism: Weapons of Mass Destruction

The most ominous trend in terrorism is also a matter of technology. With the end of the Cold War, weapons of mass destruction have slipped their traditional controls. If improvised nuclear weapons and agents are not yet available to terrorist groups, they soon will be. The proliferation of technologies of mass destruction and the proliferation of groups that actively seek mass casualties has forever changed the face of terrorism. This confluence of means and will is a benchmark develop-

ment that has qualitatively changed the nature of the terrorist threat. According to members of both the Futurist and the Terrorist Advisory Boards, an improvised nuclear, biological, or chemical attack on the United States is increasingly probable; perhaps within the next five years.

Though North Korea's weapons program represents a pressing concern, the former Soviet Union and its one-time satellite states still present the greater risk. In North Korea, such weapons remain under the firm control of a strong central government, whose willingness to distribute them is a troubling possibility, but is not yet clear. In the former communist states, control over many of these weapons has been so badly weakened that it may not matter what the central government intends.

Throughout the former East Bloc, scientists, technicians, and military personnel have families to feed, but suddenly lack jobs to pay their way. Many have first-hand knowledge of biological, chemical, and nuclear weapons. Many states and terrorist groups are hungry for their expertise and able to pay handsomely for it.

The weapons themselves also may be an immediate danger. Even now, strategic nuclear weapons remain too well guarded to be stolen or sold, but tactical weapons lie scattered across what is left of the Soviet Union. Controls over them reportedly are lax; there is little hope these weapons will remain where Soviet troops left them. A single artillery round could provide material for a crude but effective improvised nuclear device, particularly if it were designed for contamination rather than for use as a conventional nuclear weapon.

Chemical and biological weapons are even easier to acquire. Neurotoxins are closely related to many pesticides; anyone capable of making common agricultural chemicals can make Sarin or Soman. And as early as 1972, American authorities broke an ultra-right-wing terrorist organization and discovered a weapons cache that included 80 pounds of botulin toxin. Today, genetic engineering sophisticated

enough to produce custom-tailored pathogens is within reach of many would-be terrorists. This is one form of proliferation no one can even hope to prevent.

Easy access to biological, chemical, and nuclear technologies will bring many new players to the game of mass destruction. They may not even be limited to states and traditional terrorist groups. Organized crime, fanatical single-issue groups, and even individuals all will be able to acquire weapons once limited to regional and world powers.

Using them effectively will be no more difficult. If the World Trade Center bombers had packed their van with cobalt 60 or cesium-137--both commonly available in medical and industrial laboratories--they might well have rendered New York's financial district uninhabitable for generations. Pulmonary anthrax kills 99 percent of the victims it infects; only a few grams would be needed to kill virtually everyone in a major government office complex. If released in a subway, the convection currents created by the passing trains would carry the spores throughout the system, where they would be inhaled by thousands of commuters and, clinging to their clothing, would spread through offices, public buildings and suburban homes. Thousands would die. It would be days before we knew we had been attacked, and it would be virtually impossible to assign blame. To decapitate the political leadership, a vial could be dropped from the Senate gallery or broken under foot at a public function where our top political and military leaders were assembled.

Similarly, viruses that cause massive internal bleeding and for which there is no known cure--the so-called hemorrhagic fevers--could well find a place in the terrorists' inventory. These diseases are incredibly lethal. The victim dies a grotesque death, bleeding uncontrollably from every orifice, including the eyes. They go by the exotic names such as Africa's Marburg, Ebola, and Lassa fevers as well as Asia's Hantavirus. An outbreak of Ebola fever occurred in Reston, Virginia,

where laboratory animals imported from Africa infected people who had come in contact with them. The virus fortunately proved to be a variant strain that attacked primates other than man, and after a mammoth effort the outbreak was successfully contained. The lethal Hantavirus has been found in New Mexico, Arizona, Colorado, Utah, Florida, Louisiana, California, Texas, Idaho, Nevada, Dakotas, Montana and New York. Scientists only determined in 1993 that the Hantavirus occurred naturally in the American Southwest and that the outbreak was due to a confluence of natural factors. There is absolutely no indication that either of these occurrences were terrorist inspired or assisted. However, we may not always be so fortunate. In nature such pathogens are incredibly frightening. Through genetic engineering and the malevolence of man, they can be made even more virulent and could well prove to be the ultimate terror weapon.

Terrorists, however, need not resort to the exotic to pursue their aims. Europe and the Middle East are awash with sophisticated weaponry as a result of the collapse of the Warsaw Pact. Much has been stolen, diverted or sold. SAM 7s and other ground to air missiles are now readily available on the black market and, in the hands of terrorist groups, could effectively bring civil aviation to its knees. Bringing down one or two passenger airlines could effectively cripple a national airline. A more ambitious campaign could have a ripple effect worldwide, with profound economic, social and political consequences.

Even simple anti-personnel mines, such as the ubiquitous Claymore, cunningly placed outside sports arenas or government buildings could cause massive casualties. In addition to the large quantities of new Soviet and East European anti-personnel mines that are now available to those with hard currency, we estimate throughout the world there are more than 6 million Claymores that have been emplaced and never recovered, simply waiting for an entrepreneur with a shovel.

Such tactics and weapons are well within reach of many terrorist groups, and probably all rogue governments.

Those weapons will be used, and not only because once possessed they represent an overwhelming temptation. In the United States particularly, the public is remarkably capable of forgetting violence or simply taking it for granted. A week after the World Trade Center bombing, the news media were filled with speculation about a new wave of terrorism in the United States; private conversations throughout the country centered on the new threat. A year later, outside New York, the blast was little more than a dim memory, to be revived--briefly--only when the perpetrators were brought to trial. Future terrorists will find they need ever more spectacular horrors to overcome this capacity to absorb what previously would have seemed intolerable.

In the past, as we have seen in previous chapters, other concerns would have restrained terrorists from using weapons of mass destruction. Politically motivated terrorists require popular support to function. That support is seldom as committed or ruthless as the violent core of a terrorist movement, and the political extremists must temper their actions so as to avoid alienating those they hope to recruit, as well as those who provide money and logistical support. But for many of those now embarking on terrorist careers, those restraints do not apply.

Ethno-Religious Terrorism

Since the end of the Cold War, many forces have combined to unleash terrorist causes that either are new or had been buried all but forgotten under the crushing weight of the Soviet security apparatus. Where most old-line terrorist organizations served political causes, in the early 21st century they are being joined by growing numbers whose terrorist groups are motivated by religious fervor or ethnic hatred. This is a dangerous development. With many traditional terrorist groups, we

could assume their targets and tactics would be constrained by the need to retain political sympathies. We appear to be entering an era in which few, if any, restraints will remain.

Religious and ethnically motivated terrorists are more willing than most to pursue their aims by whatever means necessary. Unlike politically motivated terrorists, they do not shrink from mass murder, because they are struggling against the forces of darkness or to preserve such quasi-mystical concepts as "the purity of the race." Mass casualties are not to be shunned, because they could alienate marginal supporters, but sought, because they demonstrate to unbelievers the cataclysmic nature of divine retribution. And if innocents suffer, *God* will sort them out. Hussein Musawi, the Hezbollah leader who was killed in an Israeli helicopter assault, once commented: "We are not fighting so that the enemy recognizes us and offers us something. We are fighting to wipe out the enemy." Radical Islam not only attacks moderate Arab regimes, but has spread beyond the Middle East. It now has significant followings in Muslim communities in Africa, Asia, Europe, and the Americas.

Ethnically motivated terrorists are driven by forces almost equally powerful, a visceral tribal fealty with a mystical, almost religious overlay. The ethno-terrorist is defending his family and his community, the memory of his ancestors, his cultural heritage, and the identity of his people, most of whom have suffered and many of whom have died simply because they were Armenians, Bosnians, Basques, Irish, Quiche, Ibo or Kurds. His enemies seek the subjugation or annihilation of his people, if only in his eyes; it is his sacred duty to prevent this evil, not only for the sake of the living and future generations, but out of reverence for the dead.

Given such powerful motives, ethno-religious extremists are the terrorists most likely to kill indiscriminately and to embrace weapons of mass destruction. Thus, Hezbollah, the Provisional Irish Republican Army, the Popular Front for the Lib-

eration of Palestine, and the Tamil Tigers rank among the world's most professional and deadly terrorist groups.

Many ethnic groups, liberated by the collapse of communism, are now free to act on their ancient hatreds. Their animosities threaten to engulf the patchwork of states and independent republics that emerged from the ruins of the Soviet empire. Only now are we beginning to learn their names, histories, and agendas. Because such groups were of little interest to the traditional intelligence collector, security services know virtually nothing about their ethnic allies or their depth of support, either on their home turf or in other countries.

The Gray Area Phenomenon

Terrorist operations that target a nation's economy can be extremely effective. Radical Egyptian Islamists have been attacking foreign tourists and all but destroyed the lucrative tourist trade, dealing a serious blow to the national economy. The discovery of two cyanide tainted grapes almost destroyed the export market for Chilean produce. Even Mother Nature can be enlisted in the terrorist cause. One potential weapon could be the Mediterranean fruit fly, a voracious agricultural pest that feeds on some 250 varieties of fruits, plants and nuts. A malevolent Johnny Apple Seed single handedly could devastate the economies of whole regions. California produce, for example, earns the state \$18.1 billion annually.

Recent news reports of an extremely sophisticated counterfeiting operation located in Lebanon's Bekka Valley underscores how counterfeiting may be used as an unconventional weapon of war. Using state of the art equipment, American \$100 bills are being churned out which are of such high quality that even experienced bank officials are fooled. If terrorists were to flood a target country with high quality counterfeit currency, economic confidence and faith in the government could nose

dive, particularly if such an operation were combined with other forms of economic warfare and more conventional forms of terrorism.

Other disruption operations could target a nation's infrastructure. Our increasing dependence on the "information superhighway" will provide terrorists a new spectrum of targets. Several nations are believed to be developing computer viruses to disrupt military command and control systems and other vital computer dependent components of a nation's infrastructure. In 1992, a massive disruption of East Coast telephone service forced flights scheduled to land in New York and other East Coast cities to divert and major airports to close down. The post mortem attributed the failure to the system's dependence on telephone networks which, because of a holiday, were handling an unusually high volume of traffic. We must expect that rogue states and terrorist groups are exploring techniques to induce such failures by attacking the critical nodes of interdependent communications systems.

The international banking system would be a particularly lucrative target for both terrorists and criminal elements. Doubtless, such groups are exploring ways to penetrate and alter account information, as well as to manipulate electronic fund transfers. Stock exchanges similarly may be at risk.

In the future, we expect some industries and governments to engage in systematic campaigns to destroy their economic competitors as well as to advance their political position. Spreading false rumors and engaging in other forms of psychological warfare will become increasingly common, as will more direct measures that could include: product contamination, intimidation and, ultimately, terrorist operations.

State-sponsored operations, such as the bombing of the Green Peace ship, "Rainbow Warrior," by a French sabotage team, are less likely in the future. Governments inclined towards such activities are more likely to develop "arrangements"

with organized crime which for money or favors will carry out operations on their behalf; thereby, providing distance and insulation from blowback. If necessary, state security services could still be used to provide operational support and target intelligence.

We also expect increased criminal terrorism, which in some instances will threaten state interests, the Colombian drug cartels and the Sicilian Mafia being the best known examples. Improbable opportunistic alliances of criminal gangs have achieved a global reach. Highly sophisticated Nigerian drug barons are linked to the Jamaican posses which, in turn, use California based gangs such as the Bloods and the Crips for distribution and enforcement purposes. The Italian Mafia, the Russian Mafia, and U.S. organized crime are developing operational linkages, and will probably diversify into new enterprises that may range from trafficking in weapons of mass destruction to manipulation of stock markets and the international banking system. Criminal enterprises along the lines of The Bank of Commerce and Credit International (BCCI) will become increasingly common. BCCI not only engaged in massive money laundering and defrauding its share holders but also served as a financial conduit to some of the worlds most dangerous terrorist groups. We also expect a growing nexus between criminal multinationals and established political parties along the lines of the relationship that has existed in Italy for the past 40 years and which has brought down the ruling Christian Democratic Party and some of Italy's most prominent political figures. A similar system of opportunistic alliances is emerging in the republics of the former Soviet Union, where local, often ethnic, Mafias have a lock on the emerging private sector by forging alliances with elements in the security service and the party apparatus. As Yigal Carmon, the former counter-terrorism advisor to Israeli Prime Ministers Rabin and Shamir has noted,

the challenge of strategic crime will prove extremely difficult to counter because of the political and financial resources they can bring to bear.

Single-issue groups also will evolve in the years to come. For example, the militant wing of the anti-abortion movement is likely to split. The larger and less dangerous faction will confine its activities largely to high-profile but essentially legal forms of protest. The other, driven by the religious imperative, will turn to violence as traditional means of protest prove ineffective.

Two assumptions guide this belief. One is that *Roe vs. Wade* will not be overturned. The other is that the current Administration in Washington will investigate and prosecute crimes of the violent fringe far more aggressively than did its recent predecessors. In this, it will win support from the public, which appears increasingly alienated by the strong-arm tactics of militant anti-abortion groups. These factors will drive anti-abortion extremists underground, where isolation will further distort their view of reality. Frustration and rejection almost surely will spur them to new violence.

Environmental extremists and radical animal-rights advocates are less likely to escalate their violence than the radical anti-abortionists. Rather, they are likely to develop more sophisticated ways to harass and sabotage their ideological enemies. Their goal will be the highest possible psychological impact, not destruction for its own sake.

Terrorism As A Strategic Weapon

Terrorism has seldom threatened the core interests of the United States. Yet it has had more of an impact than most policy makers care to admit. Much of Europe and the Middle East believe the 1983 bombings of our embassy and Marine barracks in Beirut drove the United States out of Lebanon--graphic testimony to the power of two truck bombs and the will of their suicide drivers. (In truth, to the extent that

they choose to think about it, many Americans probably are under the same impression.) The successful seizure of our embassy in Teheran and the 444 day ordeal of its staff, coupled with the gutting of our embassy in Islamabad, dramatically raised the prestige of Islamic militants and the Khomeini revolution. It also was widely credited for the defeat of President Carter's bid for a second term--no mean feat for a clutch of student radicals.

Whether or not these beliefs are correct is, at best, beside the point. In this, as in so many aspects of politics and war, perception is reality. So long as terrorists believe they can strike at the United States and its interests effectively and with almost total impunity, they will continue to do so. Further, terrorist states will shape their foreign policy in the belief that the West's interests need not be taken into account; the Gulf War is a clear warning of where license may lead. Unfortunately, in the time since Teheran and Beirut, we have given terrorists and their sponsors much room for comfort.

Often, the United States has promised "swift and effective" retribution for terrorist acts; it has seldom delivered. In the eyes of many around the world, the United States has become a "paper tiger." This image has been reinforced by the debacles in Somalia and Haiti and by our failure to forcefully intervene in Bosnia, despite fiery campaign rhetoric. This perception of the United States compromises the safety of Americans abroad.

Because most of our allies have been no more effective in combatting terrorism, many terrorists find the price of hitting Western targets, including those of the United States, eminently affordable. In the "new world disorder," terrorism remains a very attractive option for the weak and the desperate, and for governments who wish to maximize their leverage while concealing their hand.

There may be many such potential terrorists. The most likely future, sketched out in Chapter 3, is one of "haves" vs. "have-nots," the gap between them increasing as Third-World populations outgrow their economies. Thanks to satellite television, the poor of the world can see in painful detail how badly their living standards lag those of the developed lands. With good reason, the ruling elites view this development with alarm. In the future, the industrialized nations will grow even richer and more comfortable, building their wealth in part on the human and natural resources of poorer regions. This is one more formula for new violence.

In Third World areas, particularly Africa, the Western democracies increasingly will be targeted for our perceived failure to stem their slide into chaos. We also will be held responsible for many natural and political calamities. Already, the United States has been accused of creating the AIDS virus as a weapon to decimate Blacks, a canard that has found acceptance abroad, and even within our own Black community. In Latin America, further economic deterioration could inspire ethnic movements such as the Zapatista National Liberation Army. Again, the United States may be seen as the puppet master behind repressive governments and exploitive companies and, as a consequence, American targets will come under attack.

In general, terrorism sponsored by the traditional rogue states should continue to decline, largely because the western democracies are better able to identify the sponsors and to retaliate. But there is a downside. Those operations that are carried out will represent the core interests of the sponsoring state, and thus may be pursued with more resources and greater zeal. As a consequence, they are more likely to be terrorist "spectaculars," on the scale of the bombing of Pan Am Flight 103 or the "Munich massacre" of Israeli Olympic athletes.

To maximize deniability, these operations will display more sophisticated tradecraft. Rogue states will increasingly look to their nationals living in the immi-

grant ghettos of the United States and Western Europe to establish support networks and, on occasion, to serve as cannon fodder. Because many are illegal immigrants, they leave a minimal paper trail. This places the security services at an additional disadvantage.

In some cases, we even may remain uncertain whether the catastrophe was a terrorist operation, or merely an unfortunate accident. This was the likely intent of the Libyans who bombed Pan Am 103. Investigators believe the explosion was timed to occur over the ocean, where the recovery of wreckage for forensic analysis would have been difficult or impossible. In that case, the crash might well have been written off as tragic accident.

A variant form of state terrorism will be that sponsored by mini-states such as those emerging in the former Soviet Union. Terrorism among such states will increase significantly and drive up the statistical totals for state-sponsored terrorism. Such terrorism, however, will be directed against each other. There may be some spill-over and Americans could become incidental casualties, but for the most part, we would not be targeted unless we are seen to be injecting ourselves into their quarrels.

Another form of state-sponsored terrorism that will not decline: the assassination and intimidation of political dissidents living in exile abroad. Such operations will continue to increase because no world power has taken serious action to punish the offending states. Instead, host countries almost invariably have sought to accommodate murderous regimes operating on their soil, so long as their own citizens are not targeted. Most seek to placate and accommodate. Because actions rewarded are actions repeated, it will remain open season on political refugees.

As terrorist operations expand in the U.S. and Europe, we anticipate a right-wing backlash that will further change the political landscape. Extremist groups and

political cults will grow into forces that cannot be ignored, and their use of terrorism will spread. Here in the United States, the Klan and white supremacy groups such as the Aryan Nations already are an established threat.

In Germany, Austria, and France, the neofascists and ultra nationalists respond to the flood of East European refugees, illegal immigrants, and foreign guest workers with terror and mob violence. If political and economic disintegration in Eastern Europe continues apace, new waves of immigration will fuel backlash terrorism and political extremism reminiscent of the chaos of the 1930s.

Targeted States

Governments generally respond to increased terrorism by beefing up the security of government installations, key components of the nation's infrastructure, and other lucrative targets. This pressures the terrorists to seek softer targets that, nevertheless, effectively coerce the government to meet their demands. Operations that generate large civilian casualties fit these parameters and, in essence, are anywhere large numbers of people gather. Choice targets include sports arenas, shopping malls, houses of worship and movie theaters. Targets such as the World Trade Center not only provide the requisite casualties but because of their symbolic nature provide more bang for the buck. In order to maximize their odds for success, terrorist groups will likely consider mounting multiple, simultaneous operations with the aim of overtaxing a government's ability to respond, as well as to demonstrate their professionalism and reach.

Despite this, terrorism will remain a back-burner issue for Western leaders as long as the violence strikes in distant lands and has little impact on their fortunes or those of their constituents. Until a country's citizens believe that terrorism poses a significant threat, traditional economic and political concerns will remain para-

mount. The industrialized nations will be too busy jockeying for access to markets and resources to be concerned with less immediate problems.

In a world dominated by economic and political interests, most of the industrialized West will deal with terrorism one incident at a time, as the need arises--playing it by ear. Many developed states will seek accommodation with terrorists and their sponsors, so long as they can find a "fig leaf" to minimize potential embarrassment. France and Germany have done business this way for many years. Both to secure immunity and for commercial advantage, Paris and Bonn have tacit agreements with some of the world's most lethal terrorist groups and their state supporters. France reportedly has formalized some of these arrangements as written agreements.

As terrorist groups and their state supporters become better attuned to the political sensitivities of those countries, they will carry out their operations so as to avoid political and economic repercussions. Both sides will take much greater care to assure that their arrangements do not become public. In effect, a symbiotic relationship may well develop between predator and prey, as new rules of the game are established.

Terrorists in the early years of the 21st century, as always, will reflect the causes that excite passion and move men to violence. During this period of tumult and transition, terrorism and other forms of low-intensity conflict will increase until a new stasis or "World Order" is established. Religious and ethnically motivated terrorists who, because of their world view, exhibit few constraints now, because of proliferation, have within their grasp the potential to create the Armageddon they seek. It is this confluence of will and means that has forever changed the face of terrorism. As a consequence, we must be prepared to defend against dangers that

only a few years ago seemed improbable. The next chapter will examine how best to prevent, preempt, deter and respond to "Terror 2000."

What Must Be Done

"Let terrorists be aware that when the rules of international behavior are violated our policy will be one of swift and effective retribution." - President Ronald Reagan-Jan. 1981, on the occasion of the return of the U.S. hostages from Iran.

"I'm as frustrated as anyone. I've pounded a few walls myself." - President Ronald Reagan-June 1985, news conference during the hijacking of TWA-847.

Hollywood has given many of us a pretty clear idea of what it means to fight terrorism. When vicious thugs seize an aircraft and threaten to murder the American passengers, just send in Chuck Norris and the Delta Force, dispatch the bad guys, and rescue the innocents.

That approach is straightforward, appealing, photogenic, and simplistic almost to the point of idiocy. This is not to deny that hostage-rescue operations have their place. But if you need a hostage-rescue team, it means the terrorists have seized the initiative. They have breached your first lines of defense, and have forced a confrontation at a time and place of their choosing.

The goal of a comprehensive strategy is to prevent, preempt, deter and respond to acts of terror. Ideally, it will enable the government to isolate the terror-prone minority, penetrate their organizations and disrupt their activities to the point their schemes never advance beyond the planning stage.

Our need for a comprehensive approach can only grow in the years to come. The public may be mesmerized by dramatic rescues and arrests, but such successes are grounded in years of slow, careful, methodical work of the most undramatic kind.

One of the most important goals of this study was to develop recommendations for future policies to combat terrorism. In the end, the members of our Futurist and Terrorist Advisory Boards identified sixteen principles which they believe must guide America's counter terrorist programs. These ideas are, for the most part, not particularly dramatic; in fact, most are plain common sense. But they could make the world a much safer place than it now promises to be.

Let's agree about what terrorism is. Simple as it sounds, the first thing we need is a generally accepted definition of terrorism that fits the post-Cold War world. We met this problem first in Chapter 2, where we discussed the definition given in Title 22 of the United States Code. Under Title 22, recall, the murder of Salmon Rushdie would not meet the definitional requirement of terrorism if the assassin acted out of religious fervor rather than political conviction. A Klan lynching would not be considered terrorism so long as it were done for racist rather than political motives. Nor would Colombia's "narcoterrorism," the use of indiscriminate violence against non-combatants for criminal purposes, no matter how many civilians died. Neither would Saddam Hussein's attacks on Iraq's Kurdish minority; terrorism, by that definition, is committed either by subnational groups or by clandestine state agents. It is not by an overt act of government against its own people. Clearly, the Title 22 definition is too limited.

Worse, it was never meant to help define a policy to counter terrorism. It is just an analytic tool. In practice, each government agency has developed its own working definition of terrorism. And by the inflexible laws of bureaucracy, if something does not fit the official definition, it must be someone else's problem. Within bureaucracies, there is also a great temptation to define new and complex problems in terms of existing capabilities and traditional approaches. This can skew or distort

our understanding of the true nature of the threat. There is a propensity to rely on off-the-shelf solutions and off-the-shelf thinking; this is a formula for disaster.

A long overdue first step is to develop an agreed on definition of terrorism. It should be a national-level definition because terrorism is a national level threat--its aim being to destroy our system of constitutional government through extra-legal means. Combatting terrorism requires close coordination of national level assets that include intelligence, diplomacy, law enforcement and military. In order to develop effective policies to counter terrorism, government agencies and the public need to know with some degree of precision what they are being asked to fight. Inertia and turf issues remain major impediments to this definitional approach. Organizations, particularly government bureaucracies, often exhibit a predisposition to resist change until it is forced on them by circumstance or tragedy. This mind set is often expressed by the phrase, "If it ain't broke, don't fix it," the assumption being that the instrument deemed "not broke" will be up to meeting the challenge--even if the challenge is qualitatively different.

Build from the ground up. A new definition should be just the first step in a "zero-based" analysis of the terrorist threat and how best to counter it. In zero-based analysis all assumptions are on the table for critical examination. There are no sacred cows. Our current policies and tactics were developed in the days when we could count on terrorists to have defined political goals and to make decisions that we could recognize as rational, at least within the vicious logic of extortion. Starting from a zero base will give us an opportunity to identify the gaps between current capabilities and future needs. In the end, we will have a better chance of coping with the rabid illogic of ethnic and religious hatred and of anticipating both the direct and the indirect consequences of our actions.

This process will be at least as difficult as it sounds, because terrorism includes such a broad spectrum of tactics. Terrorism can use low levels of violence to destabilize an otherwise peaceful society, or it can be used--as in Bosnia--to make relatively conventional warfare more effective. It can be a stand alone tactic or used to supplement more traditional methods. Terrorism is opportunistic and will mutate like a virus, as its environment changes. And in its most virulent forms, it will alter that environment to best favor its growth. Our analysis must take all these complexities into account.

Improve our intelligence collection capabilities. Ideally, the intelligence services should identify movements that could develop into full-fledged terrorist or insurgent organizations before they turn violent. Failing that, they must be capable of identifying and defending potential targets and gathering information on the terrorists themselves. Who are the terrorists? What are their strengths and weaknesses? Their agenda and support? How sophisticated are they? These and a multitude of facts and variables must be factored into a plan, if it is to meet the threat.

It is not enough to describe a terrorist movement as it exists today, however. Its thrust and direction are crucial. So are its probable responses to government countermeasures. This means identifying the real motives of the terrorist leadership. More often than not, idealistic pronouncements mask an underlying greed for power, privilege, status, and wealth. But it goes beyond this. We must also understand what drives the terrorist hard core and those on the periphery of the movement. We need to understand their motivations and their world view, and that of those they hope to recruit and those they plan to victimize. Identifying and understanding these factors and how they inter-relate enables the counterterrorism specialist to crawl inside the head of his enemy to understand his strengths and vulnerabilities so he can be dealt with in the most effective manner. It is a bit like three dimensional

chess, only a bit more complicated. It means employing disciplines that are not normally the province of traditional intelligence officers and argues for the recruitment of specialists to function as field operatives who can apply such skills to counterterrorist operations.

Recognize that terrorism represents broader underlying problems. Terrorism does not occur in a vacuum, and its targets are rarely limited to the immediate victims. Society itself is under attack in the name of those who, for one reason or another, are desperate or want a bigger piece of the pie. Defeating a terrorist movement requires isolating the hard core from its base of support and potential recruits. And that means trying to correct whatever problems have made people desperate enough to resort to violence.

This "root cause" approach is not very popular, not only because it requires a real commitment to change, but because its proponents have often overstated their case. Social programs to help the poor or disenfranchised are not a panacea; they are simply a good place to begin. People who know that their government is looking after their needs have a vested interest in the system and are much more likely to defend it. They are much less likely to accept terrorist propaganda.

Encourage participatory democracy. Terrorist movements seldom flourish where people can shape their own future. Even a limited form of participatory democracy can go a long way toward defusing a situation that might otherwise foster violence. We usually think of this when dealing with Third World countries but some of the principles and programs that work overseas and build a sense of community and personal empowerment could be put to good use in our own inner cities and impoverished rural areas.

Educate the public. We often hear that publicity is the oxygen on which terrorism thrives, and to some extent this is true. But information can also be the sword

by which terrorism dies. In general, the better the public understands the terrorists' agenda--their targets, methods, and ultimate goals--the less likely they are to support the violent fringe.

Public information is one arena in which the fight against terrorism may be won or lost. Television and satellite communications have breached an isolation that until recently helped to sustain the oligarchies that control many Third World societies. The rulers no longer enjoy an information monopoly, and this compromises in an important way their ability to control and govern. Ignorance leaves the public vulnerable. It is the responsibility of government to assure its citizens have ready access to the information that will enable them to dissect the sophistry and distortions peddled by the terrorists and their supporters.

Terrorist groups and their intellectual leaders are keenly aware of how important it is to package their message attractively and how best to access the media. They know what will play in Peoria, and on Capitol Hill. Terrorists invariably promise a new age of riches for the poor, power for the disenfranchised, justice for the downtrodden--whatever will sell in the market place of ideas. What they deliver often is something else entirely.

Governments must be every bit as sophisticated in their strategies, both at the time of an incident and in the long term. "One policy fits all" does not work in the fight against terrorism. To be effective, tactics and strategies must be tailored, both to the specific terrorist group and to its intended targets.

A critical factor in winning the information war is good reporting--gathering the facts needed to make society's case against the terrorists and then selecting them for maximum effect with each specific audience. Photographs can be a potent weapon. Even to a Serb extremist, the corpse of a Muslim child looks remarkably

like that of any other dead child. To uncommitted sympathizers, the effect can be devastating.

Messages must be tailored for the ruling elite as well, in order to change the conditions that foster terrorism. For this audience, the message is "The times, they are a-changing." If they hope to maintain their power and privilege, they may well have to negotiate with the poor and disaffected and give them a large enough share of the society's benefits to interest them in defending "the system." The war against terrorism is not won by mobilizing at the macro-level. Those in power are normally allied against the terrorists because terrorism augurs change and change threatens their dominant position. It is in the slums and the countryside where such wars are fought.

Study the terrorists and their sympathizers until you understand them. We often view terrorism as part of a battle between "haves" and "have-nots," and that is accurate as far as it goes. But we often define "have-nots" too narrowly. For our purposes, it can involve much more than material poverty. There are other currencies besides money. People may be spiritually impoverished, deprived of the freedom to express their deeply felt ethnicity, barred from practicing their particular brand of religion, or even forbidden to speak their own language or study their own history. Deprivation of any kind can turn otherwise reasonable people into "have-nots" open to the call to violence.

Radical political, religious, and cult ideologies fill spiritual voids that more established philosophies have been unable to satisfy. Their rapid rise is a clear warning that the existing system has not met the material or spiritual needs of its constituents. Those needs must be addressed before frustration turns to violence. But before they can be dealt with effectively, they must be understood. And that requires a level of interest that the ruling elites of unstable countries seldom can muster. The

need to study and understand their own have-nots, the ocean in which terrorists swim, is a lesson most governments have yet to learn.

The same rule applies to terrorists themselves, to their supporters, to potential recruits, and even to the victims. Like beauty, reality is in the eye of the beholder. In one set of circumstances, hard-core terrorists, their sympathizers, and the government all may see different "realities," and act on them. To help sort out these conflicting viewpoints, we need the help of anthropologists, psychologists, ethnologists, and historians--intellectual resources not often applied to the analysis of terrorist movements. Their information can help specialists predict how the terrorist will interpret situations and events and determine which menu of countermeasures will be the most productive.

Much of the information we need is publicly available. Terrorist manifestos can provide not only insight into the terrorist's goals and his political and psychological appeal, but may even presage shifts in his choice of targets and warn of violent campaigns to come. In the case of militant Islam, fiery orations at the mosque often serve the same purpose.

Using this information effectively will require a change of attitude within government, where there is an ingrained tendency to discount information unless it comes from clandestine sources--or any information at all, if it conflicts with existing beliefs. Too often, the more exotic the means of collection, the more credibility the information is given. Thus, data collected by satellites, electronic eavesdropping and other exotic technologies are often given greater credence than information which is overt and readily available.

Rebuild the "area studies" think tanks. To combat ethno-religious terrorism, and the other forms of violence, we will need to rely on the type of information and analysis produced by universities and think tanks, and particularly those that spe-

cialize in area studies. During the early days of the Cold War, the government subsidized many such centers with grants and contracts. These centers examined in excruciating detail the history, language, and culture of their region. They followed every minute change in the political pecking order and raised to an art form the study of political personalities and the complex of relationships and byzantine intrigues that inflamed the passions of leaders and those in their entourage. Some of the research was classified; most was not.

The nationalities and minorities of the former Soviet Union received much of this attention. Ethnic tensions received exhaustive study; so did the relationships of the nationalities with Moscow, with each other, and with their compatriots in the diaspora. Other centers focused on Eastern Europe, Asia, Africa, and Latin America. Satellite centers examined component parts of regional puzzles.

Unfortunately, in recent years, government support for this effort has largely evaporated and, for the most part, the analytic teams have been scattered to the winds. They will take a long time to rebuild. No matter how much money you throw at the problem, identifying and assembling gifted analysts is not something to be done overnight. And once gathered, they seldom yield the flashy products that attract government funding and political support.

Such talent must be scrupulously nurtured and protected from government bureaucracies more concerned with justifying next year's budget or validating current policies than with the value of penetrating independent analysis.

These are resources we badly need today. The world, as we have seen, is in transition. The most powerful totalitarian empire has imploded, and both ethno-religious nationalism and militant Islam challenge existing state structures. Without the kind of detailed knowledge and analytic skill the area centers used to provide, we will be lost in a world we cannot possibly understand or cope with.

Marry intelligence with academe. The British have always been good at this. For years they produced the type of scholar spy who could be equally at home in a Bedouin camp or among the dons of Oxford. The two worlds play well off each other.

We attempted that in the United States, back in the early days of the Central Intelligence Agency and, even before that, in the wartime Office of Strategic Services. For perhaps twenty years, Harvard, Princeton, Columbia and the other great academic institutions provided our best intelligence operatives and analysts; they received in turn very practical experience to augment their scholarly efforts.

Two factors destroyed this relationship. The more important was visceral opposition to the Vietnam War, largely centered on university campuses. For roughly a decade, almost any kind of government supported work on campus was nearly impossible to pursue if it had any strategic or military implications. The other factor was the rise of satellite imagery and communications-intercept technology. Many in government fell in love with these wonders. Techniques that logically complemented old-style intelligence gathering instead were seen to replace them. Under attack from one side, neglected by the other, the relationship between academics and intelligence specialists simply fell apart.

The problem is, spy satellites and electronic eavesdropping are a bit like looking through a keyhole. The view can be mesmerizing, but it is also very limited and very easy to misinterpret. Our satellites, intercept programs, and computers have failed us all too often. They did not help us to predict the fall of the Shah, the collapse of communism, the disintegration of the Soviet empire, or the pitfalls of providing humanitarian aid to Somalia and Haiti. Technology offers enormous quantities of information, only a little of which is useful; it does not provide understanding and cannot predict intent.

Bring back "HUMINT." Long before there were satellites, there was human intelligence, or HUMINT. And as the Aldrich Ames affair has recently demonstrated, there is nothing like having human eyes, ears, and brains in the opposing camp--what is called an agent-in-place.

There are simply too many problems with relying on satellites and electronic signals intelligence, or SIGINT, for most of your information. What we get from electronic eavesdropping is a few nuggets buried in mountains of dross. Recognizing the nuggets and routing them to the people who can use them is, to date, something only human beings can do. And electronic access to valuable information tends to be short-lived; opposition security personnel fix the communications glitch that lets us monitor cabinet deliberations, or critical meetings are moved from the conference room that was bugged at great risk and expense for no better reason than the Prime Minister wants a room with a view. For a host of reasons that cannot be anticipated an extremely lucrative operation may be shut down, leaving us without eyes or ears.

In the New World Disorder, this is a chance we cannot afford to take. And some of the most critical pieces of information for counterterrorism specialists--plans for a bombing, say, or a campaign of murders--often are carried by hand. There simply is no way to intercept them electronically.

Then, too, no matter how well we understand a society, we do not necessarily understand the terrorist organizations that spring from it. Every terrorist group is in critical ways a closed corporation. It develops its own unique culture, ethos, operational code, and value system. To fight such groups effectively, we must understand their unique social dynamics and the personal grievances and antagonisms within the organization. If we understand the tensions, rivalries, and outright paranoia that affect an organization, we may be able to induce it to self-destruct. And this type of

information can best be provided--perhaps can only be provided--by an agent in place. We need more of them. And in order to accomplish this, we need to re-examine some of the self-imposed constraints that prevent us from recruiting such penetration agents.

Executive Order 12333 is perhaps the worst culprit. For example, many terrorist groups require that members commit crimes such as robbery or murder as they move up the corporate ladder. This is to fully compromise them and, thereby, assure their loyalty to the group. If our agent should refuse, he is either out of the organization or, more likely, executed. The executive order forbids involvement of our agents in any such activity. It is something of a "Catch-22."

Prioritize our terrorist targets. Because of the proliferation of terrorist groups, we need to identify those that represent the greatest current and potential threats to our interests. Resources are limited and resource-driven triage has become a fact of life. Identification of current threats generally means close monitoring of "the usual suspects." Where it gets tricky is correctly identifying the potential threats--often groups we have never heard of or ones that traditionally have been at the margins. Resource allocation against such targets is often a judgment call and a mistake can result in a World Trade Center catastrophe. Additional resources would be a prudent investment.

Dump the "no concessions" rhetoric. At the core of American strategy for dealing with terrorism is the concept of "no concessions." Then-President George Bush summarized this policy in "Terrorist Group Profiles," published by the Defense Department. He stated: "We will not make concessions. We will continue to urge other countries not to make concessions. Rewarding terrorists only encourages more terrorism."

In light of the Iran-Contra scandal and the controversy over trading arms for hostages, it is easy to sneer at this bit of apparent hypocrisy. But George Bush inherited this policy, and it was being violated long before he reached the White House. For years, particularly in Latin America, U.S. companies have paid ransoms to guerrilla and terrorist groups to recover kidnaped executives and local employees. This has been done with the full knowledge, and occasionally with assistance from, the American government.

Even Israel, which has long been regarded as the staunchest foe of terrorism released some 1,100 Palestinians, including known terrorists, in order to secure the release of four Israeli captives. Many of the Palestinians released went on to become leaders of the Intifada and cost the lives of both Israelis and Palestinians who either opposed the violence or simply wanted to be left alone.

At best, such concessions are embarrassing for a government that has denied it will ever relent, under any circumstances, in its war against terrorism. At worst, it makes the blackmailed nation appear weak and gives the terrorists a propaganda victory. Either way, the government loses credibility.

Better to avoid being trapped by our own rhetoric. In other words, never say "never." There may be times when it is only sensible to negotiate and offer tactical concessions, particularly when the lives of innocents are at stake. Scores can be settled at a later date under more favorable circumstances. Each situation is unique and will require a tailored response. Our aim should be to create options, not foreclose them. So let us replace inviolable policies--which then wind up being violated--with a kind of "creative ambiguity" that lets us fight, negotiate, or simply stonewall, as the situation requires. The operative word is "flexibility." One makes tactical concessions in order to gain strategic advantage.

Pressure the sponsor states. So far, most of the rogue states that sponsor terrorism have found that doing so costs them remarkably little. But that has not always been so, and putting pressure on the sponsor states sometimes has reduced terrorism. Economic and diplomatic sanctions have significantly cut Syrian support for terrorism directed against the West, although Syria continues to harbor the most vicious Palestinian rejectionists, as well as violent Kurdish insurgents who carry out terrorism in Europe and Turkey. Greater pressure against sponsor states might provide even greater relief from terrorist attacks. These measures would be more effective still if we could persuade our allies not to break ranks by making secret accommodations.

There is a good argument against using a conventional military response to terrorism. When the Libyan secret service bombed the La Belle Discotheque in Germany, killing American service personnel, we responded with the famed 1986 air raid on Tripoli. Some believe that Libya's bombing of Pan Am Flight 103 was a direct reprisal for that raid. It could be argued that the high-profile bombing and the publicity it stirred backed Qadhafi into a corner. In order to retain the support of his military and intelligence services, he had to retaliate with a massive blood-letting.

There is an alternative view. As one of our forecasters put it, "We should have hit them again after Flight 103, and then again as often as necessary. It is not like trying to argue with your cat, after all. If you hit them hard enough, reliably enough, they will eventually get the idea that terrorism is more trouble than it is worth."

But it might have been better still if we had responded covertly to the La Belle bombing. Sabotaging Libyan oil production facilities, for example, would have hurt Qadhafi far more than the bombing, but it would not have been a public humiliation. He might not have been under the same pressure to respond in kind.

There is much to be said for talking softly and carrying a big stick. But that is only half the policy. The other half is to have a range of responses between a simple diplomatic protest and a headline-making act of war. Along that continuum, we may find a set of responses that we can tailor to meet the threat posed by a particular terrorist group or state without provoking violence in return.

Arrest, prosecute, and jail terrorists whenever you can identify them. This has been a pillar of American antiterrorist policy for many years. For example, the United States worked with Greece to prosecute Mohammed Rashid, a terrorist who was involved in many operations, including the 1982 bombing of a Pan Am airliner in which a young Japanese, sitting next to his parents, was literally blown apart. It took ten years to apprehend and convict Rashid, who is now serving a long term in a Greek prison. There have been cases as well in which covert American support has helped to bring terrorists to trial and punishment. A more recent success was the apprehension of hijacker Mohammed Ali Rezaq, who was released from a Malta prison after serving only a portion of his sentence for the murder of an American and Israeli passenger aboard an Egyptian aircraft hijacked in 1985. Through the cooperation of Ghana, Nigeria and several other countries, he was apprehended and brought to the United States where he currently is awaiting trial.

Until the bombing of the World Trade Center, terrorists usually targeted Americans only when they were abroad. To date, in fact, the U.S. government has apprehended and convicted only one international terrorist, Fawaz Yunis, a member of the Amal militia who was involved in hijacking a Jordanian airliner that carried two Americans. Neither were harmed, nor were American interests affected by the operation, which aimed to secure the release of an Imam who had been kidnaped and probably killed by Libyans several years earlier.

Capturing Yunis cost the United States millions of dollars and hundreds of manhours of work by FBI, CIA, Defense Department, and State Department personnel, and it is difficult to point to concrete benefits that resulted from all that effort. But Yunis himself is serving 35 years in a Federal penitentiary, and although he was only a minor figure, his punishment finally put teeth into the doctrine that terrorists can run, but they cannot hide.

That demonstration must have raised the terrorists' paranoia quotient significantly. After all, if the United States would mount such a massive operation to apprehend a minor operative, what would it do to capture a major terrorist who had directly attacked American interests? There is much to recommend the demonstration effect.

Continue training foreign security forces. For more than a decade, the United States has helped to train the agents of friendly nations in combatting terrorism. Since 1984, more than 14,000 personnel from some 75 countries have been trained by the State Department antiterrorism program. This cadre of knowledgeable, dedicated specialists forms the indispensable backbone of the world's defense against terrorism. Continuing this training program is one of the most productive things we can do to help our allies, and ourselves.

Reconvene the Vice President's Task Force on Combatting Terrorism. The original Task Force was convened in 1985 in response to a series of terrorist spectacles. Drawing on some of the best minds from government, universities, think tanks, the military, and the private sector, it helped to define the scope of the terrorist threat and to develop policies to combat it.

To cope with terrorism, we need four things: intelligence assets able to detect and report on terrorist threats, the capabilities to meet such threats, policies grounded in post-Cold War realities, and the will to carry out those policies. In light

of recent events, such as the World Trade Center bombing, the time has come for another national level Task Force to make certain this country possesses the capabilities, policies and implementing machinery to meet the terrorist challenge of the year 2000 and beyond.

That Task Force should examine the issues raised in this and preceding chapters. The National Security Council could then take the group's recommendations, set priorities, arbitrate the inevitable turf battles, and apportion bureaucratic responsibilities to the appropriate departments and agencies--building security policies for the very different world of the early 21st century.

If this book accomplishes nothing else, we hope it makes clear how much the world has changed since our existing security policies were developed, not even ten years ago. In the remains of Yugoslavia and in parts of the former Soviet Union, we see horrific communal violence and terrorism in its most raw and brutal form. In Germany, Austria, and France, the flood of asylum seekers has given new life to violent neofascist and ultranationalist movements. Ethno-religious violence is challenging governments in Europe, the Middle East, Africa, and South Asia; it could directly affect American citizens and our national interests. The list goes on.

In many countries, radical Islam has won broad influence through both conventional politics and ruthless acts of terror. Islamist terrorist organizations now reach into New York, Buenos Aires, and virtually every capital of Europe, Asia, and Africa. It already poses a threat to allies such as Egypt and Saudi Arabia, and it is gaining rapidly in Algeria and the rest of the Maghreb.

There are the rogue states--Iraq, Iran, Libya, North Korea, and Sudan, for whom terrorism and other forms of indirect aggression advance their own imperial ambitions.

In Colombia and Italy, organized crime has adopted methods indistinguishable from those of political terrorists. Criminal networks from Sicily, Russia, Bulgaria, Colombia, Serbia, and many parts of the former Soviet Union are building formal and informal alliances that could spread criminally motivated terrorism far and wide.

Under the circumstances we used to consider normal--the world of the Cold War--all these challenges might have been cause for concern, but in the end manageable. But now they are being joined by two new forces that defy management: the proliferation of nuclear, biological, and chemical weapons; and the proliferation of ethnoreligious groups fanatical enough to use them. With those developments, we lose whatever remained of a world order that had maintained an uneasy stability in the decades after World War II. The post-Cold War world has proven more terrifying than we could have imagined.

The forces that have been unleashed not only guarantee that terrorism will continue to threaten the United States and other nations, but that it will become increasingly virulent. We well may find our old ways of dealing with it do not work, and that new policies, strategies and capabilities must be developed. Like any other war, the war against terrorism can be lost by fighting it the wrong way.

Weapons of mass destruction are becoming widely available; many terrorist organizations now actively seek mass casualties: We can no longer afford to accept the first blow, struggling always to catch up with events. The cost is too high, the danger too great. Terrorism in the years 2000 and beyond will severely challenge this nation. Whether or not the recommendations of this study are adopted, new approaches will need to be developed if we are to operate effectively in this new and very dangerous world.

Middle East and Africa

On February 26, 1993, the United States received a wake-up call of the most horrifying kind: a bomb blast that killed six people, injured 1,000 more, and caused major damage to the World Trade Center, one of the most famous and economically important building complexes in New York City. Not only did the bombers prove that anti-American terrorism is alive and well--as far as the United States was concerned, the bullet-and-bomb crowd had been rather quiet of late--it has changed dramatically in the last few years.

Here in the West, and especially in the popular view, terrorism and the Middle East seem inextricably tangled. In the prevailing stereotype, terrorism in this region is the stock-in-trade of the PLO and other Palestinian organizations; of radical, violent Islamic "fundamentalists" whose beliefs and agendas are not entirely clear; and of the governments, both overtly renegade and apparently respectable, that harbor and finance them. Somewhere in the mix, a peculiarly vicious form of religious intolerance vies with revanchism to fuel the radical Muslim fundamentalists' hatred of Israel. That in turn drives their anger toward the West, which supports and defends their chosen enemies. This anger is built on a foundation of hatred for injustices both real and imaginary that were committed and perpetuated in the name of western colonialism, Christianity and the establishment of the Jewish state. For whatever religious, political, and psychological reasons, they do have a taste for kidnapping, bombing, and shooting Americans.

This somewhat muddled view was born in the takeover of the American embassy in Teheran by Islamic militants. It has been reinforced by episodes ranging

from the Salman Rushdie affair to Libya's continuing defense of the intelligence agents accused of bombing Pan Am Flight 103. It is credible, appealingly simple, and satisfying to whatever secret xenophobia lurks in the dark corners of our souls. It is even based upon a core of truth. It also is simplistic and, perhaps, dangerously misleading.

There are more than sixty countries with substantial Muslim populations, including 26 with Muslim majorities upwards of ninety percent. Politically and economically, these religiously homogeneous lands range from secular Egypt to fundamentalist Iran and from oil-rich Qatar to Yemen, where per capita income is only \$545 per year -- and that is without considering more distant Islamic lands or those with smaller, but still powerful Muslim blocs. Amid such diversity, the truth must be more complex than the public impression. It may be even more ominous.

CURRENT TRENDS

For a start, Middle Eastern terrorist organizations are extending their reach throughout the world. In France, Germany, Scandinavia, Spain, and the United States, Muslim immigrant communities are among the largest and fastest growing. Paris alone is home to 900,000 Algerians. In the United States, there will be more Muslims than Jews by the year 2000. And there are smaller Middle Eastern expatriate colonies throughout most of the world. Away from home, often poor, and surrounded by Infidels, they form ideal fodder for Islamic terrorist groups. Just one relatively little known organization, Al-Fuqra, has an estimated 200 hard-core members in the United States.

Much more prominent are Hezbollah, the Popular Front for the Liberation of Palestine - General Command, and the Abu Nidal Organization. Each has an extensive network of operatives and sympathizers, with a clandestine infrastructure throughout the world, including limited capabilities inside the United States.

Despite this, attacks on U.S. interests originating in the Middle East but occurring elsewhere have been relatively rare. Abu Nidal has not targeted Westerners since 1988. And although Hezbollah has struck at Israeli interests in Paris, Copenhagen, Stockholm--as far away as Buenos Aires--and has been highly active in Lebanon during this time; it too has not recently attacked Western targets.

This relatively benign period is the result of sudden caution among both the terrorist groups and their state sponsors. Syria, a long-time supporter of Abu Nidal, has sent his organization packing; Libya now shelters Nidal and his followers but has given them little active support. The Popular Front for the Liberation of Palestine - General Command has received funding and other aid from Iran, Syria, and Libya; it may still. Yet it appears that the organization's supporters have now limited it to operations only in Lebanon. Four factors probably account for this new found conservatism:

- 1.) The disappearance of the Soviet Union has deprived them of a counterbalance to American influence; in world affairs, there is no one left to shield terrorist sponsors.

- 2.) Iraq's military defeat in the Gulf War proved decisive enough to show that the United States can defend its interests effectively if sufficiently provoked.

- 3.) Sanctions against Libya in response to the Lockerbie bombing have been costly and the glare of publicity has forced Qadhafi to moderate his strident rhetoric and taste for terrorist operations. At least partially in response, Iran has moderated its tone and pulled a veil over its support for terrorist groups. Teheran would like to convince the West to do business with them; their strategy appears to have succeeded.

- 4.) Most recently, the Gaza-Jericho agreement between Israel and the PLO has taken the world by surprise. All but the most ruthless opponents of the peace settle-

ment have had to take a breather while figuring out how to deal with this development. Hamas has carried out a series of bombings and political murders in Israel and the occupied territories. Jewish extremists have attacked Palestinians in turn. Ironically, both groups are working toward the same end, to derail the peace process. But no one has carried out a significant attack against the United States, which although it was ignorant of the impending deal receives much credit—or blame, depending on one's point of view—for brokering the talks. In this context, the World Trade Center bombing seems an aberration—either an isolated incident or a case where the field operatives never got the word to stand down.

HOLY TERROR

But The Word is precisely what Mahmud Abouhalima and his coconspirators received. Like a growing number of disaffected young Muslims, they heard it at their local mosque, and it told them to go out and destroy the Infidel. Although suspicions abound, there is only limited evidence to suggest foreign involvement in the plot, and the bombing may have been home-grown--inspired by a famed militant cleric, supported to some degree by an informal network of grass-roots militants, but carried out largely with the conspirators' own resources and little more than spiritual aid from outside.

This is a pattern that many Muslim radicals have begun to follow, both within the Middle East and far from home. The mysterious shooting deaths of two employees of the Central Intelligence Agency on their way to work in Langley, VA, may be another such case. Terror has become a cottage industry.

Many forces prompt the growing violence of the Muslim world. In Pakistan, Muslims, Sikhs and Hindus have been at each other's throats for decades. Throughout much of the Middle East, recession bordering on economic collapse has driven the poor into city slums where food, water, sanitation, and health care are scarce and

hope is even more difficult to find. These problems all are destined to get worse, not better. No less than forty percent of the Arab population is under the age of fifteen. Their numbers will double by 2020, far outstripping any possible growth in the region's economy. But after a gap of more than a century, one other factor has returned to the Middle East. Because it is unique to this region, and because it can inspire violence almost unparalleled in the world today, we believe we should discuss it at some length.

The crucial message of the World Trade Center is not that almost anyone can build and plant a low-budget bomb, with devastating results; that has always been true. Instead, it is that modern terrorism has found an infinitely more dangerous source of inspiration than the traditional political ideologies and that its followers are prepared to act against Americans on American soil. For the first time since the Mahdi, an Islamic revival is moving the Muslim world. Earlier generations of radical Islamic bombers and gunmen sought merely to destroy Israel, their hated neighbor, or to overthrow a government they perceived as repressive and corrupt, like that of the Shah in Iran. Instead, the new generation hopes to wipe away all trace of the Infidel's culture and raise in its place a world of Shari'ah, of undiluted Islamic law.

In this commitment, the radicals stand on firm religious ground. The vast majority of Muslims are as secular as Christians; like their governments, they accept that politics can be separate from their religious beliefs. Islam has never passed through a Reformation. It remains a prescriptive religion that dictates almost every act and aspect of the true believer's life. In Islam, mosque and state, theology and politics, are one. The cleric is not only a religious figure, but a political and military leader. In every sense, his word is law, and secular authority is inherently temporal and inferior.

(Dr. Yigal Carmon, advisor on terrorism to two Israeli Prime Ministers, points out that this multiple religious role, with the clergy providing both inspiration and infrastructure for terrorism, is not unique to Islam. Jewish militants are similarly motivated and abetted. So was the late Branch-Davidian sect, in Waco, Texas.)

Muslim extremists want to see religious law—the Shari'ah—spread first across the Middle East and then around the globe. A small but dangerous minority will do anything to further that end, secure in their belief that Islam forbids violence only when it is committed against a fellow Muslim. Faced with an Infidel, the extremist believes he must put the unbeliever to the sword. In this he has the support of many Islamists' interpretations of religion and history.

In Algeria, Egypt, Jordan--throughout the Muslim world--radical Islamic extremists have lifted their swords against secular government. In Egypt, Islamists dedicated to the overthrow of the Mubarak government have killed two-hundred people since 1991. In Algeria, at least six times that many have died. Hezbollah, best known for its implacable opposition to peace with Israel and one of the most active terrorist organizations in the Middle East today, declares as its ultimate goal the creation of a new order throughout the Muslim world, governed by a theocracy like that of Teheran.

More than religion is at stake in this cultural revolution. The mortal sin of secular governments is not just that they have abandoned the Shari'ah, but that in forsaking Islamic law these repressive regimes have done nothing to eliminate the poverty, unemployment, disease, corruption, and despair endemic throughout the Arab lands. Among the poor and uneducated, the message that Islamic purity will solve both spiritual and worldly problems plays very well. In a time of general economic collapse in the Middle East, it has been taken up as well by a generation

of well educated, but equally poor and hopeless, members of what used to be the middle class.

The final step is a short one. The West has not merely supported the hated Jewish state in Palestine. It is polluted and licentious, and rich. Both maliciously and by example, it has tempted Muslims away from pure Islam. It has built a world order in which unbelievers dominate the faithful and keep them in poverty. Neither that injustice, nor the culture that created it, can be allowed to endure.

That sense of aggrieved righteousness is common to the devout of both Shi'a and Sunni Islam but seems particularly acute among the Shiites, a small minority within the Muslim world. "The world as it is today is how others shaped it," wrote Shiite Ayatollah Baqer al-Sadr. "We have two choices: either to accept it with submission, which means letting Islam die, or to destroy it, so that we can construct the world as Islam requires."

Dr. Bruce Hoffman, a respected student of terrorism with the RAND Corporation, cites four differences between the new religious terrorists and their political forebears. They apply, not just to the radical Islamists, but to violent Jewish extremists, Sikh separatists, and the white supremacists of the United States.

- Whereas secular terrorists generally consider indiscriminate violence counterproductive, religious terrorists regard it as both morally justified and an appropriate way to attain their goals. Religious endorsement legitimizes any atrocity.
- Where traditional terrorists hope to influence others, religious terrorists act for no audience but themselves.
- Secular terrorists consider violence only a means to an end; religious terrorists often view it as an end in itself. Thus, according to a RAND Cor-

poration tally, Shi'a Islamic groups committed only eight percent of the world's international terrorist incidents between 1982 and 1989, but were responsible for some thirty percent of the deaths that resulted from them.

- Secular terrorists have no basic argument with the existing order; they simply want power within it or concessions from it. Religious terrorists consider themselves completely outside a system that is to be eradicated and replaced.

Add as well a deep-rooted belief that the West is so decadent that it can never muster the political courage or will to resist a threat that is determined, persistent, and strong. To date, our response to hostage-taking and other forms of terror have done little to convince them otherwise.

In all, the radical, violent Islamists form what may well be the most potent, implacable, and fast-growing force that has ever risen to challenge the West. They will be with us for many decades to come. And as their numbers outpace the growth of the Arab economies, they will become more desperate and filled with hate.

BIG BANG THEORY

They and their chosen enemies will have an extraordinary variety of weapons with which to play. On its side, Israel will be well equipped for hostilities. The United States has recently approved shipment of the latest generation of F-15s, a reward for the Jewish state's peace agreement with the Palestine Liberation Organization. Israeli scientists are working to develop an Israeli anti-missile equivalent to the American Patriot. Many reports hold that Israel also owns a substantial arsenal of nuclear weapons.

Terrorist forces too will be well equipped. Vast tonnages of Soviet war materiel remain in Iran and Syria; Iraq's display of guns and armor during the Gulf War,

ineffective as it was, gives some idea of the equipment available in the Middle East. At least several of the Arab lands also have produced chemical and biological agents, and possess missiles capable of delivering them to most targets in this compact region. How many of these weapons have been stockpiled is not clear. One or two Muslim nations will almost surely produce their own nuclear weapons in the next few years. Pakistan is believed already to possess the necessary technology. Iran is assiduously working to acquire it. Iraq almost surely has managed to hide some of its nuclear program from United Nations investigators and unless Saddam Hussein is replaced by a more benign regime--a wish unlikely to be fulfilled--it will begin development work again as soon as the world's vigilance flags. There may be other candidates as well.

At the moment, it seems unlikely that anyone would equip fanatical terrorists with chemical or biological weapons, much less a nuclear device. Far more likely is that terrorist groups would develop biological and chemical agents on their own. The process is not difficult and results would be catastrophic.

COUNTERVAILING FORCES

Throughout most of the Middle East, counterterrorist capabilities are as poor as any in the world. Israel and, to a lesser extent, Jordan have capable counterterrorist forces. Others, like Lebanon, have none worth noting. Whatever forces are available are handicapped by an almost complete lack of cooperation and intelligence-sharing, even among Arab states, much less across the religious and political divide between Israel and its neighbors, and by the presence in the region of four of the world's seven leading terrorist sponsor states.

Professor Khalid Duran, Visiting Professor at the Institute of Iranian Studies, Freie University in Berlin, emphasizes that the violent, radical Islamists are a tiny minority in Muslim society. Most Muslims, he believes, still see violence as abhor-

rent and view the extremists as politicized, fascist, and much less pure in their faith than they claim to be. In this context, he points to four forces that in some cases can work against the spread of the radical Islamist creed: the existence of rival interpretations of Islam; the presence in a country of large or strong ethnic or religious minorities; the existence of a secular national political tradition; and favorable economic, social, or demographic factors. Figure 3 summarizes all these factors for the 63 countries with Muslim populations of ten percent or more.

NATIONAL TRENDS

Algeria

With a population 99 percent Muslim and none of the countervailing forces Prof. Duran finds significant, it is no wonder that Algeria's fundamentalist Islamic Salvation Front (FIS) won overwhelming control of local and provincial assemblies in reasonably free elections at the end of 1991. The army takeover, aimed at preventing establishment of an Islamic government, and subsequent assassination of President Mohammed Boudiaf in June 1992, left behind an regime that could not survive in the absence of military support.

Since then, the number and sophistication of terrorist attacks on government targets has grown significantly, despite mass arrests, military campaigns against armed extremist groups, and the establishment of detention camps for supporters of the FIS.

So has the variety of those attacked. In only two years, Algerian Islamist extremists have killed some 4,000 people, among them military and police officers, foreigners, artists, journalists, and secular intellectuals. In March 1994, they added to their list of targets women who fail to cover their heads in public.

| | COUNTRY | REGION | MUSLIM | GNP /CAPITA | FERTLT | R.I.I. | M(R,E) | SNPT | E(D,U) | GOVMNT STABLT | MILTRY ROLE |
|----|-------------------|--------|--------|-------------|--------|--------|--------|------|--------|---------------|-------------|
| 1 | AFGHANISTAN | SNA | 0.89 | 200.00 | 6.80 | H | H | H | L | L | H |
| 2 | ALBANIA | SNE | 0.70 | 1250.00 | 2.70 | H | H | H | L | L | H |
| 3 | ALGERIA | NA | 0.99 | 2130.00 | 4.90 | L | H | H | L | L | H |
| 4 | AZERBAIJAN | USSR | 1.00 | - | 2.30 | H | H | H | L | L | H |
| 5 | BAHRAIN | WNA | 1.00 | 7000.00 | 5.10 | L | H | H | L | L | H |
| 6 | BANGLADESH | SNA | 0.83 | 180.00 | 5.10 | H | H | H | M | L | M |
| 7 | BENIN | WA | 0.15 | 335.00 | 7.10 | L | H | L | L | L | H |
| 8 | BRUNEI | SEA | 0.60 | 9600.00 | 3.50 | H | H | L | L | L | H |
| 9 | BURKINA FASO | WA | 0.25 | 205.00 | 6.50 | L | H | L | L | L | H |
| 10 | CAMEROON | MA | 0.16 | 1040.00 | 6.90 | H | H | L | L | L | H |
| 11 | CNTRL AFRICAN REP | MA | 0.15 | 440.00 | 6.20 | - | H | L | L | L | H |
| 12 | CHAD | MA | 0.44 | 205.00 | 5.80 | L | H | L | L | L | H |
| 13 | COMOROS | SA | 0.86 | 530.00 | 5.20 | L | L | L | L | L | H |
| 14 | CYPRUS | WNA | 0.18 | 7578.00 | 3.30 | L | L | M | L | M | H |
| 15 | DJIBOUTI | EA | 0.94 | 1030.00 | 6.70 | L | L | L | L | L | H |
| 16 | EGYPT | NA | 0.94 | 700.00 | 4.00 | H | H | L | L | L | H |
| 17 | ETHIOPIA | EA | 0.45 | 130.00 | 6.80 | L | H | L | L | L | M |
| 18 | GAMBIA The | WA | 0.90 | 230.00 | 6.20 | L | H | L | L | L | H |
| 19 | GHANA | WA | 0.30 | 380.00 | 6.30 | H | H | L | L | L | H |
| 20 | GUINEA | WA | 0.85 | 380.00 | 7.00 | L | H | L | L | L | H |
| 21 | GUINEA-BISSAU | WA | 0.30 | 160.00 | 5.80 | L | H | L | L | L | H |
| 22 | INDIA | SNA | 0.11 | 300.00 | 4.10 | L | H | L | L | L | H |
| 23 | INDONESIA | SEA | 0.85 | 490.00 | 3.10 | H | H | L | L | L | H |
| 24 | IRAN | SNA | 0.93 | 1400.00 | 4.70 | H | H | L | L | L | H |
| 25 | IRAQ | WNA | 0.97 | 1940.00 | 5.90 | L | H | L | L | L | H |
| 26 | IVORY COAST | WA | 0.25 | 820.00 | 7.40 | L | H | L | L | L | H |
| 27 | JORDAN | WNA | 0.95 | 1400.00 | 5.50 | L | H | M | L | M | H |
| 28 | KAZAKSTAN | USSR | - | - | 2.30 | - | H | L | L | L | H |
| 29 | KENYA | EA | 0.20 | 360.00 | 6.80 | L | H | L | L | M | H |
| 30 | KUWAIT | WNA | 0.85 | 9700.00 | 3.50 | L | L | L | L | M | H |
| 31 | KYRGUSTAN | USSR | 1.00 | - | 2.30 | H | H | L | L | M | H |
| 32 | LEBANON | WNA | 0.75 | 1000.00 | 3.40 | L | H | L | L | L | H |
| 33 | LIBERIA | WA | 0.20 | 395.00 | 6.70 | L | H | L | L | M | H |
| 34 | LIBYA | NA | 0.97 | 5860.00 | 6.70 | L | L | L | M | M | M |
| 35 | MALAWI | EA | 0.20 | 875.00 | 7.60 | - | H | L | L | M | H |
| 36 | MALAYSIA | SEA | 0.38 | 2460.00 | 3.50 | - | H | L | L | M | H |
| 37 | MALDIVES | SNA | 1.00 | 670.00 | 4.10 | - | H | L | L | L | H |
| 38 | MAJ | WA | 0.90 | 250.00 | 7.10 | H | H | L | L | L | H |
| 39 | MAURITANIA | WA | 1.00 | 500.00 | 6.50 | H | H | M | L | L | L |
| 40 | MAURITIUS | EA | 0.17 | 2000.00 | 1.90 | M | H | L | L | L | H |
| 41 | MOROCCO | NA | 0.99 | 990.00 | 4.20 | H | H | L | L | M | H |
| 42 | NIGER | WA | 0.80 | 270.00 | 7.10 | M | H | L | L | M | H |
| 43 | NIGERIA | WA | 0.50 | 230.00 | 6.80 | L | H | L | L | M | L |
| 44 | OMAN | WNA | 1.00 | 6400.00 | 7.10 | H | L | L | L | L | H |
| 45 | PAKISTAN | SNA | 0.97 | 380.00 | 5.90 | H | H | L | L | M | L |
| 46 | QATAR | WNA | 0.95 | 12500.00 | 4.30 | L | L | L | L | L | L |
| 47 | SAUDI ARABIA | WNA | 1.00 | 4800.00 | 7.10 | L | H | L | L | L | L |
| 48 | SENEGAL | WA | 0.92 | 615.00 | 6.20 | H | H | L | L | M | H |
| 49 | SIERRA LEONE | WNA | 0.60 | 325.00 | 6.20 | L | H | L | L | L | M |
| 50 | SINGAPORE | SEA | - | 12700.00 | 1.80 | L | H | L | L | L | H |
| 51 | SOMALIA | EA | 1.00 | 210.00 | 6.60 | L | L | L | L | L | H |
| 52 | SOUTH AFRICA | SA | 0.20 | 2600.00 | 4.20 | L | H | L | M | L | H |
| 53 | SUDAN | NA | 0.70 | 340.00 | 6.30 | H | H | L | L | L | M |
| 54 | SYRIA | WNA | 0.74 | 1600.00 | 6.30 | L | H | L | L | M | L |
| 55 | TAJIKHSTAN | USSR | - | - | 2.30 | L | H | L | L | L | H |
| 56 | TUNISIA | NA | 0.98 | 1235.00 | 3.40 | L | L | L | L | L | H |
| 57 | TURKEY | WNA | 0.98 | 3100.00 | 3.30 | M | H | L | L | M | H |
| 58 | TURKMENISTAN | USSR | 1.00 | - | 2.30 | L | H | L | L | L | H |
| 59 | UGANDA | EA | 0.16 | 300.00 | 7.30 | L | L | L | M | L | H |
| 60 | UNTD ARAB EMIRT | WNA | 0.96 | 12100.00 | 4.30 | L | L | L | L | L | L |
| 61 | URBEKISTAN | USSR | - | - | 2.30 | L | H | L | L | L | H |
| 62 | YEMEN | WNA | 0.98 | 545.00 | 7.30 | M | H | L | L | M | M |
| 63 | ZAIRE | MA | 0.10 | 180.00 | 6.10 | L | - | - | L | L | H |

Figure 3

In the long run--and probably not that long--establishment of a radical Islamic regime in Algiers appears to be all but inevitable. Like Iran, it will probably sponsor terrorism against both Israel and secular Muslim regimes.

Egypt

Something over 12.5 million people live in Greater Cairo, an urban area with a sewage system designed for 2 million. Crowding is so intense that several hundred thousand people live among, and even in, the tombs of a giant cemetery known as the City of the Dead. Per capita income is only \$700 per year, and unemployment, officially estimated at seven percent, almost certainly is much higher, despite the fact that half the nation's people are subsistence farmers. Even university graduates, once guaranteed jobs with the government or foreign companies, now have an unemployment rate of up to 50 percent.

There are stabilizing factors as well, and they may explain why secular government in Egypt has survived as long as it has. Most of Egypt's people are Sunni, rather than Shi'a Muslims, a fact usually believed to reduce the risk of an extremist revolt, and Coptic Christians make up an influential six percent of the population. Yet with so poor an economy, the positive factors hardly seem to matter.

Since mid-1992, Egypt has been swept by a series of bombings and assassinations that left over 220 dead in the first 18 months of the campaign. In Upper Egypt, Gaama al Islamiya--the Islamic Group--targets the police. The group also attacks foreign tourists in order to damage the nation's economy and destabilize its secular government. Between 1991 and late 1993, the attacks were estimated to have cost Egypt \$70 million in tourist revenues. Over 180 people had died during the period, including secular intellectuals, Coptic Christians, and government officials. In August 1993, suicide bomber killed six, including two of the assailants, in an attack on Interior Minister Hassan Alfi. In November, a bomb blast outside an elementary

school killed one schoolgirl and injured 18 others; Islamic Jihad had meant the attack to kill Prime Minister Atef Sedki, who was riding nearby in a motorcade.

Egypt has responded by a crackdown on suspected fundamentalist militants and their allies. In Upper Egypt, summary arrests are daily events. In Cairo and Alexandria, university administrators have expelled hundreds of militant students, and dozens of activists have been jailed. In 1993, more than twenty Muslim extremists found guilty of terrorism were hanged. The actions have made fundamentalist militants more determined to oust the secular government.

Despite a strong electoral showing by President Hosni Mubarak's National Democratic Party in the most recent elections, our forecasters have long rated Egypt an unstable country. The Forecasters Advisory Board agrees. To date, most observers doubt that the secular government is in any danger. Yet the Muslim extremists appear to be growing stronger daily, and while it may be possible to slow the tide, it is difficult to see how Mubarak can reverse it. Egypt could fall to an Islamic extremist revolution within five years.

Iran

As unchanging as Islam itself, the Iranian radical fundamentalist regime will remain the most dangerous source of international terrorism in the world. Unyieldingly committed to the expulsion of Western influence from the Middle East, and in the long run to the destruction of the West itself, Iran will continue to fund and shelter Hezbollah and its colleagues in violence, targeting the United States for attack when it suits their purpose. Its one concession will be to hide its complicity in terrorism as best it can, in hope that the West can be gulled into supplying the technology it cannot produce for itself.

That will not be easy. In recent years, the Teheran government has been responsible for the murders of dozens of Iranian expatriates in France, Italy, Switzerland,

Turkey, Germany, Austria, Norway and at least five other countries. The People's Mojahedin, an Iranian resistance movement, lists nearly one hundred murders or assaults on expatriates since the Islamic fundamentalist regime took power in 1979. Both Switzerland and Germany have compiled solid evidence of Iranian government involvement in murders on their soil. There is little reason to hope that the murders will stop, or that countries such as Germany and France will cease efforts to open the Iranian market to their business enterprises, regardless of Iranian government involvement in terrorism and human rights violations.

Iraq

This country has several possible futures, and the forecasting community is divided about which will come to pass. In one version, Iraq must eventually decide that selling its oil is more important than maintaining its weapons program. In that case, within two years Saddam Hussein will allow U.N. inspectors full access to the country, regain his nation's oil income, and put off arms development for another day. This course became more plausible after the survey had been complete, when Iraq released two kidnapped Americans after 209 days in captivity; it seemed a clear sign that world opinion, backed by the embargo, had an effect.

In the second variant, Germany and other European nations will break the U.N. embargo, and Saddam will be able both to feed his people and to fund arms development. Some from the Intelligence Community believe this to be a more realistic scenario.

A third option, independent of the others, is that Iraq and Iran will tire of their constant hostility and agree to divide the Middle East into two separate spheres of influence. This could take place, whether Iraq opens itself to U.N. inspection or not.

The intelligence community will have to monitor all these possibilities closely. Only the first offers any hope of a more peaceful world. The others could result in

greater terrorism, and a rapprochement between Iraq and Iran would be distinctly ominous.

In any case, we will be surprised if Saddam continues to survive beyond the next three years. However, his passing will do little to change Iraq's role in the world. He almost surely will be replaced as head of the Ba'ath Party by one of his close relatives, most likely his brother. The nation's policies will not change significantly in this transition.

Israel

Inevitably, many of the most critical questions in the future of the Middle East center on the Jewish state and the Palestinian territories it has long occupied. Will the draft peace accord between Israel and the Palestine Liberation Organization survive the attacks of both Jewish and Arab extremists? Can Yasir Arafat retain support among Palestinians in the occupied territories? Can the Palestinians form an effective government, assuming they get the opportunity to do so? Will neighboring Arab governments accept a peace with their hated enemy? Given the forces arrayed against the plan, the prospects look surprisingly good.

Ironically, the best evidence for the accord's viability comes from the Hebron massacre, in which a Jewish extremist killed 39 Palestinians at prayer in the Tomb of the Patriarchs. As word of the incident spread through the occupied territories, the peace talks dissolved into something approaching open warfare. Hamas called on Arabs to take revenge for the killings. Israel poured troops into the West Bank and Gaza and enacted a 24-hour curfew. Restrictions on Jewish settlers in Hebron and other areas were so mild that Palestinians considered them more insult than response. To recalcitrant Palestinian extremists, it seemed the final blow that would destroy both the peace accord and the man they felt had betrayed them by signing it, Yasir Arafat.

It has not worked out that way. Despite calls for an all-out war from Palestinian and Jewish extremists alike and bloody terrorist attacks by Hamas that have claimed the lives of numerous Jews, the negotiations continued. By April, Israel had agreed to allow observers from the United Nations into the occupied territories, and the Palestinians had begun the process of recruiting their own police force. Israeli troops were pulling out of Gaza, and Palestinian exiles were returning home. Despite the riots and demonstrations and wanton killings by Hamas that have followed the Hebron massacre, the negotiations continue-- telling proof that the peace process will be much more difficult to derail than anyone might have dared to predict. Some Israeli-Arabs believe that Hamas no longer will try to impede the turn-over, but once the Israelis have left and the PLO is in charge, they will fight the PLO for control of the administrative machinery of government using persuasion and terror.

For Yasir Arafat it is a race against time. His popularity has eroded and Islamic terrorist groups, such as Hamas, are gaining strength at his expense--even successfully raiding PLO ranks for membership. Unless Arafat is able to quickly deliver tangible gains, he could well be marginalized. Some argue that this has already happened and that the Israelis should be talking with Hamas as well, or even instead of the PLO, because Arafat no longer speaks as the sole representative of the Palestinian masses or has the power to assure they will live up to their end of the bargain.

Adding to Arafat's woes is the fact that once wealthy benefactors such as Saudi Arabia, Kuwait and other Gulf States now provide his arch-rival, Hamas, money and support. Hamas, following the lead of the Iranian-supported Hezbollah, is building political and social structures that respond to the material, social and spiritual needs of the masses, a role once filled by the PLO. Hamas is there when tragedy strikes a Palestinian family and provides rough justice when Palestinians victimize

Palestinians unless, of course, the offender is a Hamas member. Health care, education, social welfare are all provided by an organization that increasingly is becoming an integral and indispensable part of Palestinian social structure. The PLO, in contrast, is widely perceived as bloated, ineffectual, and corrupt. In reality, the clock is ticking for Yasir Arafat and a Palestinian-Israeli peace.

One remaining and thorny issue is the role of Jerusalem. Unquestionably, it will be the capital of Israel; on this point, as on few others, the Israelis are immovable. But Jerusalem contains more than the Western (or "Wailing") wall of the original temple. It is the seat of Christianity and the location of the Dome of the Rock, the third most sacred site in Islam. So far, Israel has not committed itself to a policy of operating Jerusalem either as an open city or a dual capital. It will have to do so if it wants a lasting peace with its neighbors, or any peace at all.

A leading indicator that this issue is finally on its way to resolution arrived in April 1994, when the Holy See announced that it would accept Israel's choice of Jerusalem as its capital, provided that the city remain open to the faithful of all religions. This is a strong impetus for Israel to go along. And that could be the last major step required to ensure a lasting peace in a major part of the world's most troubled and troublesome region.

Jordan

King Hussein has tried to steer a fine line between the religious and secular worlds. Religious courts are available for the Muslim majority, but the basic legal system is fundamentally secular. This has done little to please the radical Islamic extremists, who make up a growing percentage of the population.

In the Gulf War, the king guessed wrong, backing Iraq without reservation. It cost his country much-needed financial support from Kuwait and the United States; it also caused Saudi Arabia and Kuwait to expel thousands of Jordanian "guest

workers." As a result, Jordan now has an economic growth rate of -15 percent per year.

King Hussein himself is seriously ill, and when he passes from the scene he will almost surely be succeeded by his brother who appears to lack the charisma and diverse abilities of the King.

In all, this is an unstable situation. Hussein now is scrambling to establish himself as a peacemaker, but is reluctant to sign an agreement with Israel until Syria has also accepted peace terms. The terms of Jordan's settlement with Israel already have been established, and Syria's are not far behind. This should re-establish Jordan in the eyes of its Arab neighbors. That, in turn, should ease the nation's weak economic and social situations.

In the end, it may well be Jordan's close relationship with the PLO that puts the country back on a firm footing. Some 70 percent of the population is of Palestinian origin and the population of Amman is estimated to be as high as 90 percent Palestinian. Once Gaza and portions of the West Bank are under control of the PLO, Arafat and his successors will cooperate closely with their cousins for their mutual benefit and, thereby, increase the power and prestige of the Palestinian people both within the Middle East and on the world stage.

On the surface, Jordan looks like one more Arab land that will soon be under radical Islamist rule. The Islamists have emerged with significant political power only recently winning one third of the seats in the Jordanian assembly. However, if the government is able to deliver economically, we believe the country will not fall under Islamists sway. Moreover, the political and economic bonds that will be established between the Palestinians of the Occupied Territory and Jordan's predominantly Palestinian population will mutually strengthen their ability to resist the assaults of the radical Muslim fundamentalists.

Kuwait

This may well be the most fortunate nation in the Middle East. Like Qatar and the United Arab Emirates, it is a rich land, with a relatively small gap between the society's upper and lower economic strata. That alone would probably be enough to ensure its safety from any serious Islamist threat, but there is more. Unlike any other country in the world, it has positive proof that the United States will go to war in order to protect its territorial integrity. The ruling al-Sabah family has both a strong hold on power and, though pressure is mounting for democratic reforms, few Kuwaitis would be eager to give up the comforts of the current womb-to-tomb welfare state for the implementation of strict Shari'ah.

Lebanon

For any practical purposes, this country no longer exists, but instead, has become a colony of Syria. There is no reason to imagine that this situation will change in the foreseeable future.

Libya

This is one Middle Eastern country in little danger of going fundamentalist in the near future. Col. Muammar alQadhafi supports many major terrorist organizations. They, therefore, have little incentive to replace his secular regime, even with one of their own choosing. He also is in the habit of purging his enemies en masse. The combination has proved an effective way to maintain power.

For the moment, there is little risk that Libyan supported terrorism will be much of an inconvenience for the rest of the world, although attacks against dissidents in exile continue to occur. The tightening economic sanctions imposed by the United Nations in response to his sheltering of the Lockerbie suspects has created hardships and the ever present threat of a military response serves as a deterrent. If Qadhafi

supports terrorist acts, rather than simply harboring extremist groups, he will do so only rarely, and seek to effectively distance himself from the perpetrators.

Saudi Arabia

On the surface, the House of Saud should have managed to maintain impeccable credentials with both the Muslim world and the West. Islamic law is already in force here, and the ruling family funds good works throughout the Muslim world. Its control over Mecca and Medina and its administration of the annual pilgrimage to those holy cities should have brought it honor and prestige. The Saudis also helped to support the PLO throughout the 1980s, with contributions amounting to some \$850 million -- until Yasir Arafat made the mistake of siding with Iraq in its invasion of Kuwait. All this should count heavily in its favor in the eyes of all but the extreme fundamentalists.

Nonetheless, the House of Saud is increasingly viewed as corrupt and salacious. The ruling family has gained a reputation that when abroad, they are drinkers and womanizers; this perception has increasingly eroded the pious image it tries to convey at home. The contrast has not been lost on Islamic fundamentalists in the region.

Further, low oil prices have hit Saudi Arabia hard. The world's largest petroleum exporter, it nonetheless has run a budget deficit since at least the end of the 1980s. During the last ten years the foreign assets in its central bank have shrunk from \$138 to something under \$50 billion. In the past five years alone, it has been forced to borrow an estimated \$67 billion. Cash shortages in recent years have pinched its budget for internal spending on infrastructure and cradle-to-grave welfare. They have also cut into the Saudis' donations to Hamas, in the West Bank and Gaza, and to Islamic militants in Afghanistan and Sudan.

At this point, Saudi Arabia appears to be increasingly unstable. Cassette tapes by radical mullahs are freely distributed, an ominous development reminiscent of

Tehran just before the fall of the Shah. A traveler who recently returned mentioned that you could not leave your car parked with a window open without finding someone had dropped a cassette on the seat. If within the next few years, the House of Saud is toppled by militant fundamentalists, it should come as no surprise.

Syria

With the military in firm control and largely dominated by President Assad's Allawite minority, an extremely sophisticated and brutal security force, and a history of supporting radical movements, Syria faces little risk of overthrow by violent extremists. However, withdrawing its support for international terrorism has been more than a temporary tactical decision. With its prime protector, the Soviet Union, now relegated to the pages of history, Syria has been forced to come to terms with the realities of the post-Cold War world. President Hafez al-Assad clearly prefers to remain a central power in the region than become a star of the terrorist world. In return for cooperating in the peace process, he will regain most of the Golan Heights lost in the Six-Day War in 1967. He will expect further concessions for his support of a much broader Arab-Israeli peace.

Africa

If northernmost Africa displays a few tentative signs that the future may be better than the immediate past, the same cannot be said of the region south of the Sahara. In post-colonial Africa, violence that would qualify as terrorism anywhere else in the world has become little more than a normal part of daily life. Endemic poverty, ethnic hatreds, exploitive government, and even the climate have conspired to guarantee that this will remain true throughout the foreseeable future.

Sub-Saharan Africa accounts for a much greater share of global poverty than of population. In 1991, the most recent year for which complete figures are avail-

able, the combined gross domestic products of the region, not counting South Africa, amounted to less than \$150 billion--roughly the GDP of Sweden, spread unevenly among a population twice that of the United States. Of the 180 million poor in this region, the World Bank classifies 120 million as being extremely poor. Of the region's forty-odd states, seven have per-capita GDPs of \$200 or less, while 28 have a per capita GDP of \$500 or less. In Mozambique, it totals \$60 per year.

And unlike virtually all the rest of the world, Africa is growing more impoverished, not less so. Even outside such regions as Eritrea and Somalia, where prolonged warfare has destroyed the local economy, prolonged recession and incompetent government have cut real wages by more than one-fifth throughout sub-Saharan Africa and by nearly two-thirds in some cities. The real incomes of self-employed peasants have declined by one-third. Living standards, have fallen by nearly 20 percent since the early 1980s.

The economic downturn has reduced adjusted per capita spending on education and health, with predictable results. In sub-Saharan Africa, nearly one child in five dies before his fifth birthday, life expectancy averages 50 years, and barely half of children are enrolled in primary school.

Even if the region's economy, neglecting South Africa, were to grow as quickly as the World Bank now projects, it would take forty years for Africans to regain the real incomes they had in the mid-1970s; leave out Nigeria, where a growing oil industry could speed recovery, and it would take a century. And according to the members of the Forecasters Advisory Board, even those dismal prospects almost certainly are too optimistic.

As recently as the 1960s, it might have been possible for Africa to cope with simple poverty. The continent then grew more food than it could eat. But over the last three decades, changing climatic conditions, population growth, civil wars, and

the decaying infrastructure have destroyed its ability to feed itself. The Sahara spreads at rates up to 90 miles per year, destroying farmland as it goes. Only 3 percent of the farms in Africa are irrigated; thus when rains fail, the people starve. In the Sahelian countries, just south of the Sahara, there is half as much rainfall today as there was in the 1950s. In Somalia, where petty warfare and brigandage has destroyed virtually the entire economy, drought has destroyed crops in four out of the last five years. In a normal year, without drought or other emergencies, Africa grows some 10 million tons less food than it needs. It already takes \$1 billion worth of food aid each year just to keep the majority of Africans alive, and even that is far from enough.

Africa simply has too many mouths to feed, and the problem grows worse each day. According to the United Nations, if the African population had grown even at the rate of Latin America during the 1980s, all else being equal, the continent could have avoided its deepening poverty. But the population now is growing at more than 3 percent per year, the fastest in the continent's recorded history and at least half again as fast as on any other continent. If current trends continue, and there is little that could stop them, sub-Saharan Africa's population will rise from 450 million at the beginning of this decade to 615 million by the year 2000, while per capita income will decline by another 20 percent. Thus by 2000, at least another 70 million people will live in poverty, and Africa will need 40 to 50 million tons more food each year than it currently grows.

By 2020, the region's population will total some 900 million.

The one force now slowing African population growth, though only slightly, is a source of even greater misery: acquired immune deficiency syndrome, or AIDS. The great plague of the twentieth century has been at its worst in Africa, where it

originated. Between 1987 and 1990, the number of AIDS patients south of the Sahara doubled, to an estimated 5 million; its spread has not slowed since then.

In many cities, the disease is even more common. In Nairobi, the rate among adults has passed 5 percent. In Lusaka, Zambia, and Kampala, Uganda, nearly one adult in four now carries the virus. In Abidjan, in the Ivory Coast, it is the leading cause of death among adults. As long ago as 1989, researchers from the American Centers for Disease Control and the University of Abidjan found that more than 40 percent of the male cadavers in the Abidjan morgue, and roughly one-third of the female cadavers, carried HIV.

Throughout sub-Saharan Africa, AIDS is now the leading cause of death among women between the ages of twenty and forty.

An estimated 10 million African children will die of the disease in the 1990s.

To all these problems, add the effects of history. The borders drawn by European powers throughout Africa did not create true nation-states, where people linked by similar ethnic or cultural backgrounds manage their affairs as relatively homogeneous groups. Instead, they forced native peoples together without regard for tribal identities and long-standing animosities. The result mirrors the post-Soviet chaos engineered by Stalin--but with an added tradition of tribal warfare, which long predates the colonial period, and has easily survived it.

Thus, ethnic battles are endemic throughout the continent. In Rwanda the Hutu are waging a genocidal war against the Tutsi minority. In Zaire's Shaba province, the Katangese majority routinely persecute the wealthier, better educated Luba minority from neighboring Kasai. Somalia's devastation has tribal roots. Angola, Burundi, Liberia, and Sudan all suffer active ethnic wars. And, of course, South Africa's Zulus have fought bitterly to avoid rule by the Xhosa-dominated African National Congress.

All these problems point to a progressive breakdown of what little order exists in sub-Saharan Africa. Growing poverty is always a source of potential violence. AIDS is destroying the family structure throughout much of the region. Refugees from one ethnic battle flee across artificial political boundaries, carrying their problems into the traditional homelands of other ethnic groups no more likely to welcome them than their rivals at home. Members of the Futurist Advisory Board expect only more chaos in this troubled region. Terrorism inevitably will be one common ingredient in all the local situations that grow from these continental forces. Few African nations are equipped to deal with any of their problems, much less all of them at once.

Recent reforms have done little to improve the situation. According to the World Bank, only six countries have made an adequate start at rebuilding the inefficient, corrupt socialist economies that most adopted after gaining independence: Burkina Faso, Gambia, Ghana, Nigeria, Tanzania, and Zimbabwe. In all six, industrial output, exports, per capita income, and savings have risen. Yet the results have been less than impressive. Ghana, with an economy growing at 4 percent per year, still has a per capita GDP of only \$450. Tanzania maintains import quotas on over one-hundred items. Nigeria has privatized few of its state-owned industries, and General Sani Abacha, latest in a string of military rulers, recently discarded the entire reform program; in 1992 and early 1993, some \$4.5 billion in government funds simply disappeared, presumably into the general's pockets and those of his friends. None of this augurs well for the years to come.

The situation is more dismal yet in neighboring lands. Zaire probably is the worst example, but its problems are found in varying degree all over sub-Saharan Africa. President Mobutu Sese Seko reportedly has amassed a personal fortune of more than \$5 billion, looted from the public treasury. Set up in power by the United

States, France, Belgium, and Morocco, he has survived by paying his friends well, punishing his enemies, and fomenting strife between ethnic groups.

His latest machinations are aimed at undermining the popularity of Etienne Tshisekedi, whose opposition party he first allowed to form a government in 1992, then deposed three days later. Tshisekedi is from Kasai, homeland of the Luba people, so Mobutu and his underlings have worked hard to fan the latent hostility of the Katangese. They have succeeded all too well. At least 100,000 Luba have been driven from their jobs and homes in Katanga, herded into boxcars, and shipped back to Kasai. The army in Kasai has "mutinied," dissolving into bandit gangs reminiscent of Somalia. The giant Gecamines copper mine has been abandoned, its equipment stolen and sold by bandits in return for bribes paid to the provincial governor, and indirectly to Mobutu himself.

This chaos has crippled Zaire's economy. Unemployment runs at 80 percent. The nation's GDP is down by nearly a third. Inflation reached more than 6,000 percent in 1993. The banking and tax systems lie in ruins. But the political threat from Tshisekedi is long forgotten, and Mobutu's money machine grinds on.

Zaire lacks the vast arsenals that have made Somalia's warlords so dangerous, and where Somalis starve, Zaire's fertile land and tropical climate make serious food shortages less likely. Nonetheless, the U.S. State Department early in 1994 suggested that Zaire may become "Somalia and Liberia rolled into one, with vast potential for immense refugee flows, regional destabilization, and humanitarian disaster." This could be the next challenge sub-Saharan Africa throws up to a harried world.

Three other trouble spots already lay claim to American attention: Somalia, Sudan, and South Africa. We will take them in that order.

Somalia has already had its "15 minutes of fame," as far as Americans are concerned. The U.S. military's 15-month mission there is over, and the attempted intervention is unlikely to be repeated, though the need for it remains virtually unchanged. Somalia still overflows with weapons from sidearms to tanks. After 2 year's hiatus, drought has returned to the region, crops have failed, and the Somali people once more face the threat of starvation if international humanitarian agencies cannot keep them supplied with food.

They may not be able to do so. The 19,000 or so United Nations troops remaining in Somalia are spread too thinly to keep order in a lawless area nearly the size of Texas. They will spend their time trying to guard ports, airfields, and other critical installations, leaving the vast countryside to fend for itself. Aid workers are already being kidnapped and murdered. The World Food Program has closed its office in Kismayu, some 250 miles south of Mogadishu, and the United Nations has been forced to evacuate its outpost in Merca, about 60 miles from the capital, thanks to fighting between the forces of warlord Mohammed Farah Aidid and his chief rival, Ali Mahdi Mohammed. In a separate incident, Aidid's fighters ambushed 24 Pakistani soldiers stationed in Somalia with the U.N. All this occurred within three weeks after a much publicized "peace accord" between Aidid and his competitors for Somali leadership.

None of this will draw the West back in for another attempt to control the chaos, or even to feed the hungry. Lawlessness in Somalia once amounted to rampant terrorism; it probably will do so again in the near future. But it will not affect American interests.

One prospect does justify monitoring, however. Some 99 percent of Somalia's people are Sunni Muslim, and Hezbollah has established at least a small infrastructure among them. Whenever something resembling stable government returns to the

nation, the extremist organization may well begin to push for establishment of an Islamist regime like that of Iran. In the very long run, Somalia could emerge as the continent's southernmost outpost of Islamic extremism.

To date, that position is held by Sudan, where the Arab, Muslim north has been at war against the animist, Christian, black south virtually since the country became independent in 1956. In the last ten years, the fighting has reached a crescendo. An estimated 1 million people have died, and 3 million southerners--roughly half the region's population--have been forced to flee. Tribal warfare among the southern rebels themselves adds to the carnage. And, early in 1991, drought created the worst famine since 1988, when an estimated 300,000 Sudanese died of starvation. The warring parties have not been able to agree on a plan to let U.N. aid workers into the region.

In the last four years, Sudan's ruling party, the National Islamic Front, has transformed a relatively secular society in the north into the Muslim extremist's vision of a theocracy. Islamic law is, if anything, even more strict than in Teheran. Opposition parties are banned, and the press has been shut down. People suspected of opposing the regime are tortured regularly. Office workers throughout the country are required to join the Popular Defense Force, an Islamist paramilitary group.

A recent United Nations report detailed gross human rights violations throughout the country, and Amnesty International has accused the Sudanese government of practicing "ethnic cleansing" against the Nuba in the south. Yet terror at home has not been enough to satisfy the Khartoum regime. Sudan has allied itself with Iran, whose Islamic revolution it emulates, and now provides training, transport, and logistical support for terrorist organizations including Hamas, Hezbollah, and Egypt's Gamat. The bombers who eventually would attack the World Trade Center in New York received Sudanese passports and contacts among Sudanese diplomats

if they needed further aid; Sudan nonetheless denies complicity in the bombing. The country reportedly has also supported fundamentalist groups attacking aid workers in northern Somalia. The members of both the study's advisory boards expect Sudan to play a growing role in international terrorism in the years to come.

That leaves South Africa, where the long-simmering conflict between the African National Congress, the rival Inkatha Freedom Party, and hard-line white separatists is at a turning point. The ANC, of course, won the first all-race national elections in April 1994; that outcome had been obvious almost since the DeKlerk government released Nelson Mandela from prison some four years earlier. But the ANC failed to win the crucial two-thirds majority it needed to write the new constitution on its own. How that constitution will be negotiated, what will result from the process, how well the ANC will adapt to governing after more than 80 years in opposition, and how it will pacify such erstwhile enemies as Inkatha's Mangosuthu Buthelezi and the 70-odd white extremist organizations all remain to be seen.

For the United States, these questions hold more than theoretical interest. South Africa is the richest state south of the Sahara, a rich source of raw materials that are scarce or unavailable in other countries, and the only nation in the region where Western business has more than a toe-hold. If stability comes to South Africa, trade will flourish and American executives will stream in; if years of simmering bloodshed explode into all-out factional war, American interests will be directly affected.

One clue to the future probably arrived in March, when outgoing President F.W. DeKlerk sent troops into Bophuthatswana to quell an uprising against the homeland government of Lucas Mangope. As violence escalated, Mangope sought help from paramilitary forces of the Afrikaner Volksfront, led by General Constand Viljoen, and the Afrikaner Resistance Movement of Eugene Terre'Blanche. Even before the army arrived, the white separatists were beaten badly; military action at

times seemed more rescue than rout. The incident did not break the power of the white separatists, but it seemed to settle any threat of mass violence, either from the white right or from black tribal movements.

The lesson was reinforced a few weeks later, when DeKlerk again sent troops to pacify a troubled homeland, this time KwaZulu, Buthelezi's own power base. This time, the white militias stood aside while the army put an end to the worst of the factional fighting. Inkatha had already lost much of the support it once held among Zulus. Even in its native Natal, according to recent polls, fewer than one-third of Zulus now support Inkatha; most of the rest are arrayed solidly behind Mandela and the ANC. The threat of violence was the one card left in Buthelezi's hand, and that is much less impressive than it once appeared. Attacked heavy-handedly, Inkatha might well mount a bloody guerrilla campaign that could last for years. But to date the army has avoided the KwaZulu capital of Ulundi and other such strongholds. That policy almost surely has the support of the ANC.

All this suggests that the coming Mandela government will work to placate its enemies, not to destroy them. Inkatha and the white extremists both have demanded autonomous homelands for their supporters. According to the members of the Forecasters Advisory Board, based on recent events, they may well get them. This is not an ideal way to build a unified, democratic nation, but it may well be the best that Nelson Mandela can do.

The remaining questions deal with the African National Congress itself. How cohesive is it? How ready to assume power? And how patient will its constituents be as it tries to remedy the effects of years of apartheid? At this point, no firm answers are possible.

The ANC has extraordinarily broad support, given the deep divisions of the country in which it grew. One-third of its candidates are women. Many are Zulus,

and some even are Afrikaners; they seem too deeply committed to abandon the ANC once it comes to power, whatever its policies. But much of the organization's traditional power base and infrastructure come from the Communist party and the trade-union federation COSATU; no fewer than sixteen of the ANC's top fifty leaders are Communists. They may want a strong say in the new government's economic policies, and they are unlikely to get it. (If the dismal record of socialized economies is not enough to dissuade Mandela from centralized planning, the World Bank will weigh in against them.) Whether they will continue to support a free-market ANC remains to be seen.

The African National Congress also lacks the kind of infrastructure that parties rely on when trying to build a stable government. It is only in the last year or so that the Johannesburg headquarters has learned to get its telephone answered regularly. Where it will find administrators capable of governing a nation also is an open question.

Finally, Mandela's constituents have enormous needs, and probably even more wants. Per capita income among blacks is no more than 10 percent of white income. One-fourth of blacks live in barely habitable shanties. Half are illiterate. Nearly as many lack clean water. Blacks receive only one-third to one-half as much money per capita as whites for education, health, housing, and pensions. It will take years and vast new tax revenues to correct such disparities. The ANC's campaign platform promised a nationwide public works program to provide jobs for 2.5 million unemployed, 1 million new homes in the next five years, and a long list of other benefits it has no realistic hope of delivering. There is no way to know how the ANC's supporters will react when South Africa's reality cannot live up to their dreams.

None of this promises an easy return to stability, but how much violence remains in South Africa's future depends largely on the policies of the new ANC government. If Mandela and his colleagues try to force a unified one-man, one-vote democracy on so divided a land, both white separatists and Inkatha will wage vicious terrorist campaigns to secede from South Africa. In that case, the bloodshed of recent years could seem a time of relative calm before an all-out war. Yet if the ANC can manage to work with its rivals, as it apparently must do to form a new constitution, it could defuse one of the most volatile situations on the continent.

There is little the United States can do to promote a peaceful transition to majority rule in South Africa. Neither is it likely to suffer directly from the wave of terrorism that chaos there could bring. But the promise of growing trade with the richest nation in southern Africa will draw American businessmen to the region in growing numbers. Their safety, and the economic promise of this new democracy, require whatever financial and technical help America can give the incoming government. Beyond that, all we can do is watch and wait.

Asia and Its Environs

As a breeding ground for kidnapping, bombing, assassination--low intensity conflict in all its forms, no region in the world is as riven as Asia. On the Indian subcontinent, India, Pakistan, and Bangladesh all suffer ethnic and sectarian violence at levels rarely seen outside the Lebanon of the 1980s. Sri Lanka is savaged by the Tamil Tiger separatist movement. Indonesia battles two regional insurrections, though in these conflicts there is some question whether the rebels or the government are more guilty of terrorism; in East Timor, over 200,000 civilians have died under Indonesian rule since 1975. Myanmar, or Burma, is home to no fewer than twenty small separatist movements; the Karen minority has been fighting continuously since Burma received its sovereignty in 1949. The Philippines has fought both communist and Muslim insurgencies for years. In Cambodia, the Khmer Rouge has once more taken over about one-eighth of the country, and it continues to build its infrastructure of terror. Japan has small but active terrorist movements at both ends of the political spectrum. Even China has begun to experience violent protests. In all this vast region, North Korea alone seems immune to terrorism, a political tactic that leader Kim Il-Sung approves only when sponsoring it abroad.

Despite this endemic chaos, international terrorism has been comparatively rare. In all of 1993, the U.S. Department of State catalogued only 37 incidents of international terrorism in Asia, compared with 13 the year before and 48 in 1991. This compares with 101 in the Middle East, 97 in Latin America, and 180 in Western Europe. In Asia, the terrorists are too busy killing their neighbors, and Western influence is too remote from the grass roots, for American or European personnel

or facilities to become attractive targets. With rare exceptions, Americans have faced danger only through bad luck or proximity to local targets, as in 1992, when the U.S. Information Service's American Center in Colombo, Sri Lanka, was damaged by a truck bomb intended for a nearby installation of the Defense Ministry.

A quick tour of the region's most important countries illustrates the magnitude and diversity of Asian violence and terrorism:

The fighting is worst in India, where it has been almost endemic since the end of British rule in 1947. India and Pakistan have gone to war four times for control of the border state of Jammu and Kashmir, which is divided between them, and the prospect of doing so again never seems far off. Arguably, the threat of war with a neighbor is the least of India's problems. In Assam, in the northeast corner of the country, the Bodo Security Force and the United Liberation Front for Assam fight New Delhi, and each other, for control of an impoverished state squeezed between Bangladesh and Bhutan. In Jammu and Kashmir, the only state in India with a Muslim majority, rival terrorist organizations demand that India either cede the state to Pakistan or give it independence under a radical Islamist government. In nearby Punjab, Sikh separatists belonging to at least fifteen individual terrorist groups have repeatedly attacked buses, trains, busy markets, and other civilian targets; the most important organizations are Babbar Khalsa, the Khalistan Commando Force, and the Khalistan Liberation Army. Just in these two states—Jammu and Kashmir and Punjab—more than 4,000 civilians died in 1992, along with another 3,500 militants and security officials.

Scarcely a corner of the country is immune to civil disorder, in which terrorism plays a key role. In just a few of the major events since December 1992:

Hindu militants leveled a mosque in Uttar Pradesh, in north-central India bordering Nepal. At least 2,000 people died in two months of widespread rioting that followed; some estimates put the toll much higher.

Activists supporting the Indian Peoples Front shot and killed five people returning home from a rally of the Bharatiya Janata Party, a militant Hindu group that seeks to expel Muslims from the country and the fourth-largest political party in India.

Two days of rioting between Hindus and Muslims in the northeastern state of Manipur killed at least 110 people, injured 300 more, and left something over 2,000 homeless.

In Manipur also, six Kiku tribesman were killed by members of the rival Naga in a continuing battle for control of narcotics, which enter India across the state's border with Myanmar. (We will find terrorism in service to the drug trade again when we look at Latin America.)

State government workers in Srinagar, the summer capital of Jammu and Kashmir, came under attack with rocket-propelled grenades. Two rival separatist groups both took credit for the incident.

A wave of explosions in the Bombay financial district killed 225 people and wounded more than 1,000.

And in two provinces in the Northeast, the Mizo National Liberation Front and the Naga Separatist Movement wage ethnically-based insurgencies aimed at establishing their own states.

The chaos in India will get worse before it gets any better, and not only because Pakistan supports the Muslim terrorists in Jammu and Kashmir and the Sikh militants in Punjab. Until 1947, India consisted of some 560 native states and subdivisions, each of which still retains something of its old identity, in social reality if not

in political form. No fewer than 24 languages each claim more than a million native speakers; fully 1,652 separate dialects are spoken. The caste system, though banned in theory, remains in practice so rigid that many government jobs are officially reserved for untouchables and members of other "scheduled castes" at the bottom of the social hierarchy. Fully 3,000 ethnic and social groups and half the Indian population belong to the so-called "backward classes." And while the Indian economy is expanding rapidly, the Indian population is growing even faster. In 1990, the population was 853 million; by 2025, it will reach an estimated 1.442 billion. This vast country suffers such overwhelming religious and social divisions that not even the most efficient government could hope to make it stable; India's regimes have traditionally been sluggish and corrupt even by Third World standards. It is difficult to see how even greater violence can be avoided.

In Sri Lanka, the Liberation Tigers of Tamil Eelam have killed an estimated 28,000 people since 1983. In the North and East, a region the Tigers identify as the Tamil "homeland," the LTTE regularly massacres Muslims and Sinhalese by the hundred. Recently, it has taken to planting cyanide-tipped spikes in rice fields to drive out Muslim and Sinhalese farmers. Throughout the country, it plants bombs and assassinates officials. In the past three years, it has used car or motorcycle bombs to kill a deputy defense minister, the commander of the Sri Lankan Navy, and at least fifty people in and around the Military Operations Headquarters of the Ministry of Defense, in Colombo. Disturbingly, two of these bombings were carried out by suicide drivers, who clearly demonstrated a level of dedication that secular movements rarely inspire.

Compared with India and Sri Lanka, and with its own recent past, the Philippines have been almost free of terrorism since the United States withdrew its forces at the end of 1992. In previous years, the Communist Party of the Philippines and

the New People's Army, its military wing, had assassinated both American and Philippine officials; they have not been connected to attacks on American personnel since 1991. The Alex Boncayo Brigade, an urban murder squad of the New People's Army, has recently become active again after a quiescent period. So far, their targets have been confined to criminals and government officials known to be corrupt.

On Mindanao, the Moro National Liberation Front, a Muslim separatist group, has also been relatively quiet, after years of insurrection. In 1992, their most dramatic undertaking was the destruction of a power-line pylon, which caused a brief power outage on part of the island. A similar bombing in April 1993 blacked out 14 of the island's 22 provinces, but power was restored to most areas within two days.

Kidnappings, on the other hand, are rife. Many have targeted Americans, and many have been carried out by organizations that initially coalesced around political causes. But more often than not, the motive has been profit rather than politics. In one typical case, the Red Scorpion Group, a criminal gang spun off from dissident elements of the New People's Army, kidnapped an American businessman named Michael Barnes and demanded \$20 million in ransom; Barnes was released by a police raid after two months in captivity. In another incident, Muslim bandits kidnapped ten Filipino civilians and forced them to help transport logs cut illegally in Basilan.

Only one terrorist unit clearly represents a danger to Americans: the Abu Sayyaf Group, a radical anti-Western faction of the Moro National Liberation Front. The group is violently opposed to the peace settlement in the Middle East and has announced that it will adopt the strategy of Egyptian militant fundamentalists, attacking tourists in an effort to undermine the local economy.

Tangentially, the Red Scorpion Group could become a problem as well. It has threatened to bomb foreign embassies in Manila, possibly in an attempt to extort an amnesty from the government.

In Japan, at least three terrorist organizations have achieved some prominence:

By far the largest is the Chukaku-Ha, which is generally translated as the "Middle-Core Faction" or the "Nucleus Faction." The 3,500-man organization is a radical-leftist group that hopes to abolish the Japanese monarchy and end the U.S.-Japan Security Treaty. A secondary goal is to halt construction of the New Tokyo International Airport. The group has carried out minor bombings and rocket attacks--a typical incident involved four home-made rockets launched at the Ground Self-Defense Force Okubo training base, in western Japan--but seems interested only in publicity, not in causing casualties. Chukaku-Ha carried out no fewer than 185 attacks between 1990 and June 1993, or 85 percent of the terrorist incidents in Japan during the period; none was lethal. It has launched rocket attacks against U.S. military bases in Japan.

Potentially far more dangerous is the Japanese Red Army, a Marxist group based in Syrian-occupied Lebanon. The organization's stated aims are to overthrow the Tokyo government and to promote world revolution. Sponsored by Palestinian extremist groups, including the Popular Front for the Liberation of Palestine, the JRA has been responsible for civilian killings, bombings, and hijackings. Though the group remained inactive throughout 1992 and much of the following year, in September 1993 Tokyo police issued a warning that the peace agreement between Israel and the Palestine Liberation Organization might trigger a new wave of terrorism by the Japanese Red Army.

Third on the list is the Issuikai, or the "One Water Society," a right-wing terror group. Though Issuikai is violently anti-American in its rhetoric, we have not been

able to identify an attack on American interests that has been definitely linked to this organization.

Unfortunately, Japan is one country in which the United States and its citizens could soon come under fire. The cause is more economic than military. Japan is in the middle of what from the U.S. appears to be a minor recession, but in Tokyo appears to be an economic cataclysm with devastating social consequences. Land values throughout the country have plummeted by one-third from their peak in the 1980s. Kobe beef is at least four times as expensive as American imports would be. Rice costs ten times as much as it would if it were supplied by American farmers, and the once-firm consumer support for Japanese rice farmers--an icon of traditional culture--is eroding quickly. "Temporary" lifting of the ban on rice imports to cope with a severe rice shortage in 1993 caused some protest, but much less than the mere suggestion of allowing imports has done in the recent past.

The social contract is equally frayed, as Japanese diplomatic officials privately admit. At roughly two percent, unemployment would barely register on the American awareness, but in Japan it represents a major problem. One reason is that women now contribute significantly to the Japanese family income, yet are not counted in employment figures. When workers are laid off, women are first to go, and their job loss is never registered. Already, the Japanese auto industry has begun to lay off male workers who thought they had a guarantee of lifetime employment. Executives in other industries are also talking about adopting what they refer to as "American management methods." The problem will grow worse as Japan continues to ship much of its manufacturing overseas, bringing home only the bottom-line profits, not the value added. This loss of job security will be blamed on American pressure to reduce Japan's balance-of-trade deficit, and with some cause. Extremists at both

ends of the political spectrum could well express their displeasure in violent attacks on Americans and their facilities. Business offices in particular could be at risk.

There is another potential source of friction as well. For years now, the United States has been pressing Japan to pay for its own defense, strengthen its military, and take a more active role in world affairs. This has already triggered at least two terrorist events: late in 1992, Chukaku-ha launched home-made rockets at the home of the Defense Agency Director General and set bombs near the home of a prominent legislator, the Chairman of the Upper House Steering Committee. Both incidents were in protest of the decision to send Japanese troops overseas. Blame for future Japanese military involvements could well fall on the United States and might well inspire terrorist incidents involving Americans.

In fact, we do not really expect any of these possible threats to prove important. Even when hostility toward the United States was at its highest, Japan's terrorists usually target their own government and its officials. Yet if the late 1990s turn out to be a time of growing violence in Japan, American interests will be a logical target for terrorists with a variety of causes.

Mainland China suffers relatively little terrorism, for obvious reasons: the People's Republic deals harshly even with peaceful dissent. Yet it is not wholly immune to the problem. In 1992, Muslim separatists blew up a bus in Xinjiang province, on the northeast frontier; six died, and twenty were injured in the incident. Soon after, a small bomb exploded on-board a train traveling from Pingshi to Guangzhou; it caused only minor damage. Tibetan militants attacked the Chinese Embassy in New Delhi. In addition, a gunman in Pakistan kidnapped six Chinese officials working on a copper project; whether there was a political motive in the incident remains unclear. There have also been minor riots--one in Tibet left fifty protesters dead--and a series of airline hijackings by people wishing to escape the country.

To date, North Korea has been a sponsor of terrorism, not a victim, and even in that role it has been quiet of late. It has not backed an international terrorist incident--so far as anyone has learned--since 1987. It claims to have ceased supporting the New People's Army, in the Philippines. It does still harbor a group of hijackers from the Japanese Communist League Red Army Faction, who fled there more than twenty years ago.

However, North Korea is run by one of the world's most volatile regimes, and it faces growing economic and political pressures. Pyongyang's current problems began with the fall of the Soviet Union and its satellite states, on which North Korea depended for food and energy. Widespread food shortages have been reported in the countryside. The country's primitive factories have cut back to about one third capacity, and the only native fuel source--highly polluting brown coal--is quickly running out. Corruption in government is increasingly common, criminal gangs are proliferating, and black markets are flourishing. For no particularly strong reason, blame for the nation's growing hardships appears to be falling on Kim Jong Il, who is expected to take power on the death of his father. Even in a country riddled with government informers, where minor dissent can earn a long sentence in a labor camp, this is not a formula for stability. The need to distract public attention from the failing economy may be one more reason the Kim clan has fomented its current disagreement with the West.

Though North Korea's hostility remains under control, it might not take much to break the Kims' apparent calm--and the provocation could be on its way. As noted in Chapter 3, all but one of the forecasters on our Futurist Advisory Board, and virtually all of our counter-terrorism specialists, believe that unless Pyongyang opens its suspected nuclear-weapons facility to international inspection, the West will have little choice but to destroy it, as Israel did the Osirak reactor complex in

Iraq. If it comes to that, the price of nuclear nonproliferation could be a global wave of terrorist violence at facilities owned by the powers Kim Il-Sung blames for the attack. The United States would surely be high on his list. Kim's Marxist sympathizers in Japan would be among the most active and vengeful of the pro-North terrorists.

For the moment, the most serious prospects for anti-American violence spring from Pakistan and Afghanistan, where many of the terrorists now active in the Middle East received their training as mujaheddin fighters against the Soviet occupation. Egypt, Algeria, and Tunisia all have officially accused Pakistan of providing support and shelter for terrorists seeking to overthrow their governments, a charge Islamabad denies. Whatever aid the previous regime gave radical Islamists from Arab lands, the Bhutto administration is likely to prove far less supportive. Afghanistan, however, will continue to provide as much aid as it can.

The problem is spreading rapidly throughout southern and eastern Asia. Hamas, Hezbollah, the Abu Nidal Organization, and perhaps other less well-known terrorist organizations from the Middle East are quickly building infrastructures among Muslim populations throughout the area. As these networks become established, they may import the political and religious goals from Iran and its neighboring states. Afghanistan seems a likely vector for this contagion.

The precedent has already been set. During the Gulf War, Muslim groups in Malaysia vehemently protested American intervention, and hundreds of Islamic fundamentalists reportedly volunteered for non-combat duty in Iraq. At least two minor terrorist incidents targeted American interests in Kuala Lumpur during the period. In one, police defused a crude bomb planted near the local office of American Airlines. In the other, two men attacked a Malaysian security guard stationed on the grounds of the U.S. Embassy. In Manila, one man was injured and another

killed, apparently while attempting to set a bomb near the U.S. Information Service center; both carried Iraqi passports. Similar attacks were believed to have been planned by Muslim separatists in Thailand.

If the North Korean problem can be negotiated away and a serious campaign of anti-American terror still materializes in the Far East, this will almost surely be the source. It will have more to do with Israel and the Palestinians than with local Asian hostilities. And as the Middle East becomes more peaceful, Asia should return to normal--chaotic, but largely benign to Americans and their interests.

1. *Pharmaceutical industry* – The pharmaceutical industry is a major player in the healthcare sector, responsible for the development, production, and distribution of drugs. It is a highly regulated industry with significant research and development costs. The industry is often criticized for high drug prices and for prioritizing profit over patient care.

Journal of Management Studies, 19(6), 701-718.

[illegible]

Figure 1. The effect of the initial concentration of the monomer on the polymerization of α -methylstyrene initiated by $\text{C}_6\text{H}_5\text{MgBr}$ in THF at -78°C . The concentration of the initiator was 0.01 mol/L . The concentration of the monomer was 0.01 mol/L (○), 0.02 mol/L (□), 0.04 mol/L (△), 0.06 mol/L (◇), 0.08 mol/L (×), 0.10 mol/L (●), 0.12 mol/L (○), 0.14 mol/L (□), 0.16 mol/L (△), 0.18 mol/L (◇), 0.20 mol/L (×), 0.22 mol/L (●), 0.24 mol/L (○), 0.26 mol/L (□), 0.28 mol/L (△), 0.30 mol/L (◇), 0.32 mol/L (×), 0.34 mol/L (●), 0.36 mol/L (○), 0.38 mol/L (□), 0.40 mol/L (△), 0.42 mol/L (◇), 0.44 mol/L (×), 0.46 mol/L (●), 0.48 mol/L (○), 0.50 mol/L (□), 0.52 mol/L (△), 0.54 mol/L (◇), 0.56 mol/L (×), 0.58 mol/L (●), 0.60 mol/L (○), 0.62 mol/L (□), 0.64 mol/L (△), 0.66 mol/L (◇), 0.68 mol/L (×), 0.70 mol/L (●), 0.72 mol/L (○), 0.74 mol/L (□), 0.76 mol/L (△), 0.78 mol/L (◇), 0.80 mol/L (×), 0.82 mol/L (●), 0.84 mol/L (○), 0.86 mol/L (□), 0.88 mol/L (△), 0.90 mol/L (◇), 0.92 mol/L (×), 0.94 mol/L (●), 0.96 mol/L (○), 0.98 mol/L (□), 1.00 mol/L (△), 1.02 mol/L (◇), 1.04 mol/L (×), 1.06 mol/L (●), 1.08 mol/L (○), 1.10 mol/L (□), 1.12 mol/L (△), 1.14 mol/L (◇), 1.16 mol/L (×), 1.18 mol/L (●), 1.20 mol/L (○), 1.22 mol/L (□), 1.24 mol/L (△), 1.26 mol/L (◇), 1.28 mol/L (×), 1.30 mol/L (●), 1.32 mol/L (○), 1.34 mol/L (□), 1.36 mol/L (△), 1.38 mol/L (◇), 1.40 mol/L (×), 1.42 mol/L (●), 1.44 mol/L (○), 1.46 mol/L (□), 1.48 mol/L (△), 1.50 mol/L (◇), 1.52 mol/L (×), 1.54 mol/L (●), 1.56 mol/L (○), 1.58 mol/L (□), 1.60 mol/L (△), 1.62 mol/L (◇), 1.64 mol/L (×), 1.66 mol/L (●), 1.68 mol/L (○), 1.70 mol/L (□), 1.72 mol/L (△), 1.74 mol/L (◇), 1.76 mol/L (×), 1.78 mol/L (●), 1.80 mol/L (○), 1.82 mol/L (□), 1.84 mol/L (△), 1.86 mol/L (◇), 1.88 mol/L (×), 1.90 mol/L (●), 1.92 mol/L (○), 1.94 mol/L (□), 1.96 mol/L (△), 1.98 mol/L (◇), 2.00 mol/L (×), 2.02 mol/L (●), 2.04 mol/L (○), 2.06 mol/L (□), 2.08 mol/L (△), 2.10 mol/L (◇), 2.12 mol/L (×), 2.14 mol/L (●), 2.16 mol/L (○), 2.18 mol/L (□), 2.20 mol/L (△), 2.22 mol/L (◇), 2.24 mol/L (×), 2.26 mol/L (●), 2.28 mol/L (○), 2.30 mol/L (□), 2.32 mol/L (△), 2.34 mol/L (◇), 2.36 mol/L (×), 2.38 mol/L (●), 2.40 mol/L (○), 2.42 mol/L (□), 2.44 mol/L (△), 2.46 mol/L (◇), 2.48 mol/L (×), 2.50 mol/L (●), 2.52 mol/L (○), 2.54 mol/L (□), 2.56 mol/L (△), 2.58 mol/L (◇), 2.60 mol/L (×), 2.62 mol/L (●), 2.64 mol/L (○), 2.66 mol/L (□), 2.68 mol/L (△), 2.70 mol/L (◇), 2.72 mol/L (×), 2.74 mol/L (●), 2.76 mol/L (○), 2.78 mol/L (□), 2.80 mol/L (△), 2.82 mol/L (◇), 2.84 mol/L (×), 2.86 mol/L (●), 2.88 mol/L (○), 2.90 mol/L (□), 2.92 mol/L (△), 2.94 mol/L (◇), 2.96 mol/L (×), 2.98 mol/L (●), 3.00 mol/L (○), 3.02 mol/L (□), 3.04 mol/L (△), 3.06 mol/L (◇), 3.08 mol/L (×), 3.10 mol/L (●), 3.12 mol/L (○), 3.14 mol/L (□), 3.16 mol/L (△), 3.18 mol/L (◇), 3.20 mol/L (×), 3.22 mol/L (●), 3.24 mol/L (○), 3.26 mol/L (□), 3.28 mol/L (△), 3.30 mol/L (◇), 3.32 mol/L (×), 3.34 mol/L (●), 3.36 mol/L (○), 3.38 mol/L (□), 3.40 mol/L (△), 3.42 mol/L (◇), 3.44 mol/L (×), 3.46 mol/L (●), 3.48 mol/L (○), 3.50 mol/L (□), 3.52 mol/L (△), 3.54 mol/L (◇), 3.56 mol/L (×), 3.58 mol/L (●), 3.60 mol/L (○), 3.62 mol/L (□), 3.64 mol/L (△), 3.66 mol/L (◇), 3.68 mol/L (×), 3.70 mol/L (●), 3.72 mol/L (○), 3.74 mol/L (□), 3.76 mol/L (△), 3.78 mol/L (◇), 3.80 mol/L (×), 3.82 mol/L (●), 3.84 mol/L (○), 3.86 mol/L (□), 3.88 mol/L (△), 3.90 mol/L (◇), 3.92 mol/L (×), 3.94 mol/L (●), 3.96 mol/L (○), 3.98 mol/L (□), 4.00 mol/L (△), 4.02 mol/L (◇), 4.04 mol/L (×), 4.06 mol/L (●), 4.08 mol/L (○), 4.10 mol/L (□), 4.12 mol/L (△), 4.14 mol/L (◇), 4.16 mol/L (×), 4.18 mol/L (●), 4.20 mol/L (○), 4.22 mol/L (□), 4.24 mol/L (△), 4.26 mol/L (◇), 4.28 mol/L (×), 4.30 mol/L (●), 4.32 mol/L (○), 4.34 mol/L (□), 4.36 mol/L (△), 4.38 mol/L (◇), 4.40 mol/L (×), 4.42 mol/L

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all cases. The number of correct responses was significantly higher than the number of incorrect responses in all cases.

2. 1990年12月15日，在《中国日报》刊登了“中国日报”的“中国日报”广告。

Journal of Management Inquiry, Vol. 19 No. 1, March 2010
DOI: 10.1177/1056492609358000
© The Author(s) 2010

1. *Phragmites* (common)

Europe

Terrorism as we know it may have emanated from the Middle East, but it was born in Europe, with the murder of 11 Israeli Olympic athletes at Munich in 1972. Ever since, the Continent has remained one of the most important theatres of the terrorist war, and one of the most critical to American interests. So it will be in the years to come.

In Europe, we can see all the trends now reshaping terrorism to fit the world of the 21st century. For now, serious international terrorism appears at bay; there has not been a major incident in Europe since the bombing of Pan Am Flight 103, in 1988. Terrorism from the left seems moribund as well; late in 1993, the remnants of Germany's Red Army Faction issued what amounted to a declaration of retirement. Yet many traditional terrorist campaigns remain active. In 1993, the "troubles" in Northern Ireland reached a new peak of bloodshed; Basque separatists in Spain still killed an average of one person every month; Greece suffers a tiny, but vicious, leftist terrorism; Turkey remains mired in a chaotic battle between the government, communist groups, and Kurdish separatists, its problems with Kurdish militants and terrorists being fought in the streets of half a dozen European capitals.

And these causes have been joined by new ones. In Germany, racist right-wing violence targets asylum seekers and "guest workers." In what is left of Yugoslavia, of course, we have the prototype for the ethnic wars that threaten much of the former Soviet Union. And in Italy, the Mafia has escalated its terrorist campaigns to intimidate law enforcement and criminal prosecution. This is not the tranquillity that so

many commentators hoped would follow the end of the Cold War. But it is what we can expect for the next fifteen or twenty years.

Much of the violence now plaguing parts of Europe originates in the decline of communism itself. Driven by economic hardship and ethnic terror, refugees are streaming into Western Europe in record numbers. In 1983, only 30,000 people per year sought asylum in Europe; by 1992, the number had climbed to almost 940,000, including 695,000 from the former Yugoslavia and nearly 108,000 from Romania. Germany alone received 438,000 asylum-seekers in 1992, up from 121,000 only three years earlier. By the end of 1992, Germany was actually providing asylum for 827,000 people. In all, about 6 million non-Germans were living in Germany, most of them "guest workers" invited from Turkey, Italy, and Yugoslavia to ease the labor shortages of the 1960s--or their descendants. Unlike the United States, Germany does not grant automatic citizenship to anyone born within its borders.

This influx of foreigners has strained social services and provoked a backlash from the xenophobic right. There were nearly 2,300 attacks on foreigners in Germany in 1992, up from 270 in 1990. Seventeen people died, including four members of a Turkish family whose home was firebombed; they had lived in Germany for twenty-three years. By April 1993, another 670 attacks were recorded; about one in five were arson attacks on houses and public shelters occupied by non-Germans.

To date, this violence is the work of an extremist minority. Some 40,000 right-wing extremists are active in Germany, according to government estimates. Of these, some 6,500 are skin-heads, most of them living in the East, who are responsible for most of the worst incidents. According to Bernd Wagner, an expert on young extremists, the neo-Nazis are organized into small, disciplined groups linked by telephone and fax. Ernst Uhrlau, chief of the Hamburg bureau of the Office for the Protection of the Constitution, the extremists are circulating "hit lists" giving the

names and addresses of people opposed to racist and Nazi activities. Some have been published in an underground magazine.

Yet anti-foreign feelings in Germany run deeper than the core of trouble-makers. Without much evidence, many Germans blame immigrants and refugees for housing shortages, unemployment, and rising crime. In October 1992, the weekly news magazine Der Spiegel published a poll reporting that 73 percent of all Germans believed it "especially important" to "get a grip on the problem of foreigners." Other polls have found that about one in four people in the former East Germany under age 25 hold political and social beliefs typical of right-wing extremists. In another recent survey, one German in three felt that Adolph Hitler's Nazi regime had "had its good side" in the years before World War II. Ten percent of western Germans and 4 percent in the East endorsed the statement, "It is the Jews' own fault that they have been persecuted so often in their history," while another 28 percent said there was "a bit of truth" to that view. In the September 1992 municipal elections, the extremist Republican Party garnered 11 percent of the votes in the Bavarian city of Passau, more than twice as many as two years earlier. The party, which is headed by Franz Schonhuber, a former sergeant in the Waffen SS, ran on a platform advocating an end to asylum for refugees. These are not hopeful signs.

Austria, too, is facing a wave of right-wing terrorism in response to an influx of refugees. The Vienna government estimates that 250,000 foreigners now live in Austria, many of them refugees from the war in Bosnia-Herzegovina; some right-wing politicians claim the total is nearly double that--this in a nation of only 7.8 million people.

So far, the violence has been directed, not at the foreigners themselves, but at political figures who defend minority rights or seek to ease the lot of refugees. On December 5, 1993, the 66-year-old mayor of Vienna, Helmut Zilk, was injured by

a letter bomb. A similar device was sent to Helmut Schuller, president of Caritas, a humanitarian relief agency heavily involved in helping victims of the conflict in Bosnia and Croatia. Silvana Meixner, a journalist who anchors a weekly program for ethnic minorities, suffered head and facial wounds when a letter bomb exploded in her hands. The priest heading a Papal relief mission was injured in a separate attack. Madeline Petrovic, leader of the Greens Party and a well-known defender of minority rights, also received a letter bomb, which was safely defused. In one four-day period, ten such bombs injured four people, all of them activists working to help refugees. Security officials believe neo-Nazis were responsible for the incidents. The letter bombs were extremely sophisticated, police reports noted.

The wave of refugees from Eastern Europe is only one source of immigrants to Western Europe. A second, even larger, originates in North Africa. France is now home to 3.5 million Muslims, some 900,000 of them from Algeria. Germany hosts 2 million Muslims, many of them among the guest workers whom Germans once saw as an aid to future prosperity. Even Scandinavia has some 90,000 Muslims. They do not always fare well in their new homes. In Germany, and to a lesser extent France, Muslim immigrants have been threatened, beaten, and murdered. Muslims and Hindus in Great Britain have been attacked by racist gangs and neo-fascist groups. Such incidents may well grow with the Muslim population.

At this point, it is impossible to be certain what will come of the current wave of refugees and immigrants streaming through Europe. For much of the Continent, it is uncomfortably easy to spin ominous scenarios from current trends.

France, where neo-fascist violence to date has been limited, seems less concerned with its own radical right than with another potential problem. In November 1993, French police arrested 88 suspected members or sympathizers of the Islamic Salvation Front, a prominent extremist group. Among the large Muslim population,

they fear, there may well be some who are not fleeing the violent Islamic fundamentalist minority in the Middle East, but instead represent it. These "infiltrators" could become a source of future terrorism on behalf of Iran, Iraq, Libya, or Palestinian extremists. In the "borderless" European Community established by the Maastricht Treaty, they would find it easy to move personnel and supplies from one country to another, committing acts of random violence almost at whim. If the problems of the Middle East spill over into Europe, as they so often have in the past, we may expect serious terrorism on the European continent to escalate.

In Germany, right-wing violence has ebbed. Despite a burst of incidents early in 1993, the number of hate crimes through the end of November was down by 28 percent from the same period of 1992. One reason may be simple public revulsion; as many as 50,000 Germans have participated in protests against the right-wing terror campaign. And the government has cracked down on violence. Two neo-Nazis convicted of a 1992 firebombing in Moelln that killed three received the longest sentences possible under German law--life in prison for one, ten years for the other, who was a minor at the time of the arson. It seems to have discouraged their colleagues on the extreme right. But another reason for the decline in violence may be that the racists got what they wanted: the German constitution has been changed to restrict immigration. Future extremists could look back on this as proof that terrorism works.

They may be available to heed the lesson, for there is another way to interpret the relative peace of late 1993. In moving to stop the violence, Germany may have driven its extremists underground and forced them to learn better "tradecraft." And, in fact, there is some evidence that German neo-Nazis are organizing themselves, learning better security practices, and in general becoming more sophisticated. In future, ultra-right-wing terrorists may be harder to infiltrate, more selective in their

targets, and much more deadly. It probably depends as much on the German economy and the pace of development in Eastern Europe as on anything Bonn does to rein in the right.

So far, we remain hopeful. Germany does not like to think about its Nazi past, but the majority of Germans do remember. For many, "never again" is a compelling slogan. If the German economy rebounds, Eastern Europe grows more stable, and the flow of refugees begins to slow, fascism will subside. In that case, right-wing terrorism should continue its decline throughout Europe. Pending further evidence, that seems the most probable future.

At the moment, it even appears that Northern Ireland may be on the path to a peaceful solution to its long-running "troubles." At the end of 1993, talks between Protestant and Catholic leaders are continuing despite some of the worst carnage in years. To many, the survival of the talks appears to be the first sign of a possible breakthrough in the hostilities since 1972, when Britain assumed direct rule over the six Ulster counties. (The three remaining counties in Ulster are ruled by Ireland.) Even stalled negotiations, based on proposals virtually all of which are unacceptable to one side or the other, are better than no talks at all.

Northern Ireland is a reminder of just how effective terrorism can be at creating fear, and how ineffective it may be when facing a resolute citizenry and a strong, stable, determined government. In a population of roughly 1.6 million--950,000 Protestant, the remainder Catholic--there are only 400 to 500 active guerrillas in the Provisional Irish Republican Army and perhaps ten times that many sympathizers. There are fewer still among the hardline Protestants, according to most experts. Yet over the last twenty-five years, the "troubles" have killed about 3,100 people and wounded more than 35,500. There have been more than 33,000 shootings, nearly 9,800 bombings. An estimated 70 percent of the 400,000 people who live in Belfast

live in religiously segregated neighborhoods. Maintaining even an approximate peace costs Britain about \$3 billion per year--a direct cost of \$10.5 billion, partially repaid by \$7.5 billion in taxes. Yet Prime Minister John Major's government is as committed as its predecessors to remaining in Northern Ireland as long as the pro-union Protestants need protection.

At the moment, it seems that could be a long time. Talks between Prime Minister Major and IRA leaders have not gotten the organization to renounce violence. (In truth, there is precious little cause to assume that IRA hard core would obey an order to stand down.)

Talks between John Major and his Irish counterpart, Albert Reynolds, have not led Britain to accept an eventual end to its control over the province, as Northern Catholics demand, nor the Republic to amend its constitution, which claims dominion over the North, as Northern Protestants require. And Protestant militants have stepped up their activities, so that they now kill more civilians than the IRA.

Yet there is room for hope. The IRA, though not yet ready to end its terrorist campaign, appears at least to be considering the possibility, something that not long ago would have seemed impossible. The Irish Republic appears increasingly worried that if it ever did absorb the North, it might have to cope with the violence that now plagues Britain. And the IRA's supporters in America have grown increasingly disillusioned with the random slaughter; donations from the United States reportedly have dried up, and it will be more difficult to support the movement without them. The tide may be turning in favor of peace.

Will Northern Ireland be free of terrorism by 2010? Probably not. Will terrorism be a much smaller problem then? We think the chances are now 60:40 for peace. That is a lot better than they have been in the last twenty-five years.

The same cannot be said of Europe's oldest continuing separatist movement, the Basque rebellion in Spain. Despite the arrest of several leaders and terrorist cells in Spain and France, Basque Fatherland and Liberty (ETA)-Military continues its campaign of bombing and assassination, killing two or three people each month. Though the ETA usually stays close to home, the organization has at least limited international reach: bombings have hit Spanish targets in Italy, the Netherlands, and Germany as well as Spain and France. ETA once had two factions. ETA-Political-Military left the field since the Basques won limited home rule in 1982. The hardliners remaining with ETA-M will be satisfied with nothing less than sovereignty over the Basque regions of Spain, something Madrid will not give. This is one insurrection that will not go away until its followers are captured or die off without leaving political heirs inclined to take up the cause. With ETA membership estimated at several hundred, plus several thousand sympathizers, that could take a long time. And in Italy, leftists attacked a U.S. airbase in September, 1993 and a NATO school in Rome in January, 1994.

In Greece, the radical left persists as two tiny, but very busy terrorist groups: Revolutionary Organization 17 November and the Revolutionary People's Struggle (ELA), a coalition of even smaller affiliates. Combined, the two probably total fewer than one-hundred active members. Neither would merit attention from the United States, save that both are virulently anti-American. ELA has targeted U.S. military and business facilities, while 17 November was responsible for at least one-third of the fifteen terrorist acts in Greece during the Gulf War, including the assassination of a U.S. Army sergeant. Though relatively inactive in 1993, 17 November only this year attacked American interests. It is difficult to see how either of these organizations could survive if Greece had an effective antiterrorist program, but the country's efforts are among the least efficient in Europe. There were

signs that Athens might be trying to improve the security situation, but with the return of the Left to power, there is little reason for optimism as, in the past, key security officials associated with the Left were believed to actively collaborate with both Middle East and home grown terrorist groups.

Turkey, also, faces a troubled future. Its terrorist problem is one of the most complex and virulent in Europe:

Devrimci Sol, or Dev Sol, is an intensely xenophobic organization of several hundred devout Marxists, virulently opposed to the United States and to NATO. In 1991 alone, it staged more than thirty bombings against Western diplomatic, business, and cultural facilities, claimed responsibility for assassinating two American contractors and a British businessman, and for the attempted murder of a U.S. Air Force officer. In 1993, it planned a rocket attack on the U.S. Embassy, as well as other anti-American activities. At least two other leftist groups, the Peasants Liberation Party (TIKKO) and the Turkish Workers, also carry out terrorist operations.

The Kurdistan Workers Party (PKK) claims fully 3,000 active members and as many supporters. It too is Marxist, but its primary goal is to establish an independent Kurdish state in southeastern Turkey, bordering the Kurdish areas of Iran and Iraq. In 1993, PKK launched a terror campaign against the tourist industry, threatening American visitors to the area. It claims also to have carried out no fewer than 664 separate military operations during September 1993 alone, killing 929 Turkish soldiers and 174 village guards, while losing 148 guerrillas killed in the process.

If that were not enough, the thoroughly secular government of Turkey is hated by fundamentalist extremists throughout the Islamic world. Iran, the Popular Front for the Liberation of Palestine-General Command, Hezbollah, and the Abu Nidal Organization all are believed to have built infrastructures in Turkey. How actively

these groups are working to undermine the Ankara government is not certain, but all would be eager to strike against American interests in Turkey.

One of the most important terrorist campaigns in Europe has little if anything to do with politics. It is happening in Italy, which not long ago thought it had eliminated terrorism when it defeated the Red Brigades. Instead, the Mafia has engaged in assassination campaigns and random bombing in an attempt break the will of those in government who fearlessly and successfully have dared to do battle with the Mafia and allied criminal organizations. It isn't working.

In the last three years, the Italian government has cracked down on organized crime--and itself--in a way that would have been unthinkable just a few years ago. This may be one more result of the end of the Cold War.

Before the allied landing in Sicily in World War II, agents from the Office of Naval Intelligence visited a prison in upstate New York. There, in a tense meeting, they asked crime boss "Lucky" Luciano to help pave the way for the invasion. He agreed, and throughout the German occupation Luciano's Mafia colleagues collected intelligence, welcomed parachuting allied agents, and ultimately guided the invading Americans past German strongholds in a dash across Sicily. Luciano's people became indispensable to the Americans, and ultimately to the occupation government, in which they became firmly entrenched.

After the war, they proved equally adept at fighting the well-organized Communist Party, financed by Moscow. Mafia "soldiers" warred with equally brutal communist thugs at a time when there was a very real danger that Italians would vote the communists into power. The Mafia grew, prospered, and bound itself to the Italian political establishment. The Christian Democratic Party, which ruled the Italian political scene for decades, maintained close ties with the mob in the impover-

ished South, where they reportedly traded lucrative government contracts for the guaranteed delivery of critical voting blocs.

When the communists were gone at last--or so it seemed--the forty-year alliance began to come apart. Tired of routine crime and corruption, a few crusading prosecutors and judges set out to break the Mafia's hold on politics. The mob retaliated by killing as many of its antagonists as possible; one victim was prosecutor Giovanni Falcone, a crime fighter whose reputation for honesty and courage had made him a hero throughout Italy. They even bombed the Uffizi Gallery in Florence, killing six and destroying priceless Renaissance artworks.

In the last two years, the investigation has scored major triumphs against mobsters and their government collaborators. Aided by nearly four-hundred Mafia informers, the government has jailed more than two-hundred major criminals, including Salvatore Riina, the reputed "boss of all bosses," who had avoided capture for two decades. Investigations have implicated more than 3,000 politicians, businessmen, and government workers in crimes ranging from bribery to attempted murder. Augusto Citanna, head of domestic intelligence in Genoa, was arrested for planting a bomb on a passenger train. (It did not go off.) And Riccardo Malpica, who spent four years as director of the civilian civil service, and his secretary have been charged with embezzling \$30 million in secret government funds. In an attempt to reform the secret services, several top generals have been fired, and four-hundred officers are facing forced resignation.

The scandal has had one other result as well. In the municipal elections held in November 1993, members of the once-invincible Christian Democratic Party were swept from office. Three-fourths of the nation's mayors were replaced, mostly by current, former members, and allies of the Italian Communist Party. One was the mayor of Palermo, Sicily, once the ultimate Mafia stronghold.

But by 2000 or so, the campaign of the bombings and assassinations should be over. A much smaller, less powerful Mafia almost surely will survive, but whether its hold on government will be broken is problematic.

What comes next on the political scene is still in doubt. Italy's national elections, held late in March 1994, amounted to a revolution-by-ballot. Before the election, the centrist Christian Democrats held nearly 30 percent of the seats in the 630-member lower house of Parliament; afterward, the two surviving centrist parties--the Pact for Italy and the Popular Party--held only 7.3 percent of the seats, while the Christian Democrats had disappeared entirely. Leftist parties captured about one-third of the seats, a negligible increase. But the big news was the overwhelming victory by three right-wing parties: the new Forza Italia, with nearly one-fourth of the total vote; the separatist Northern League; and the neo-fascist National Alliance. Together, the three parties captured nearly 40 percent of the vote.

Italy now will be ruled by a coalition between Forza Italia, led by television magnate Silvio Berlusconi, and the Northern League, but it is the third-place National Alliance that represents the most startling change in Italian politics. Though more polished and less openly racist than German neo-Nazis, and forbidden by law to call itself fascist, the National Alliance clearly harkens back to the extreme nationalism of Mussolini. Whether the party will, now that it has established itself, adopt Il Duce's policies--state control of most industry, militarism, and harsh repression of dissent--remains to be seen.

Though the National Alliance disavows violence and avoids open anti-Semitism, its attitude toward neo-Nazis remains ambiguous, and its most ardent supporters clearly are Italy's 40,000 or so skin-heads. In Italy, the skin-heads are scarcely a shadow of their counterparts in Germany. There were only thirty or so neo-Nazi attacks on foreigners in all of 1993, compared with hundreds in Germany. Nonethe-

less, incidents of immigrant-bashing have risen sharply since the beginning of 1994, and it seems this could be the beginning of an ominous trend. Any increase in German-style terrorism against foreigners will have to be monitored closely.

For Europe, this is a promising decade. There is a vicious war in the former Yugoslavia, and potential trouble spots abound, but so far none of these problems appears likely to survive far into the next century. Yet at least two things could go wrong. Neither is probable, but either would be so important that they are worth monitoring.

For the first, picture a right-wing "domino effect." Throughout Europe and the former Soviet Union, the nationalist right is building a power base. We have already seen its strength in Germany, and much of the next chapter is devoted to ethnic nationalism in the formerly Soviet republics. Yugoslavia has been torn apart by Serb nationalism. Czechoslovakia has split peaceably into two ethnic states, but there is no guarantee that they will remain stable. Albanians in Kosovo are under virtual military occupation by Serbs. Romanian nationalists have tried to exploit resentment against the Hungarian and Gypsy minorities. Bulgaria has traditionally suppressed its Turkish minority, which accounts for 10 percent of the country's population. There are Hungarians in Serbia and Slovakia; Poles in Belarus, Lithuania, and Ukraine; Germans in Czechoslovakia, Romania, Slovakia, and even Kazakhstan. Tinder is spread far and wide.

In many of these regions, inflation is high, unemployment higher, the need for scapegoats pressing. After Serbia's march through Bosnia, all but unopposed by the rest of Europe, a neo-Nazi renaissance in Germany could be all the inspiration that Europe's ethnonationalists require. Repressive, xenophobic, authoritarian states could proliferate. Ethno-nationalist extremism is strong in Russia; it could triumph. So too the small, but virulent, nationalist right of France. And what about Italy? It

has a strong right wing, a history of militarism, and growing economic and social problems of the kind that often inspire extreme nationalism. Few remaining Western democracies could face a political and economic alliance of neo-fascist, ultra-nationalist governments reminiscent of the 1930s, but most probably having learned that strategic economics, political encroachment, and exploitation of traditional xenophobia are the more fruitful ways to pursue their imperial ambitions.

The other possible threat seems more likely, if only marginally less chilling. Germany is home to some 6 million non-Germans, most of whom arrived as guest workers some thirty years ago, or are descended from those who did. For many, second and even third generation immigrants, it is the only home they have ever known. Turkey, Greece, and Italy, their ancestral homes, are either distant memories or completely foreign. What if Germany decides to send its guest workers back where they, or their parents, came from?

Not long ago, it would have seemed unthinkable, but not long ago it also seemed unlikely that Germany would restrict the right of refuge, which was written into its constitution at the end of World War II. If the right-wing extremists renew their terror campaign, Bonn could take the next fatal step in an attempt to appease them, rather than accept the political heat that would greet a crackdown.

The result would be devastating. Turkey is in chaos, with political unrest, high unemployment, and an inflation rate of some 70 percent (as of 1992); its gross domestic product per capita is around \$3400, compared with more than \$22,000 in Germany. Greece is in better condition, but not up to the task of integrating returnees into an economy that provides an average income barely one-fourth as high as they are used to. Italy has a per capita GDP of nearly \$17,000, but its economy is in recession, its unemployment rate high. None of these countries could provide jobs, housing, or social services for the guest workers they would have to absorb. Terror-

ism directed against the returnees and against those countries that expelled them could sweep much of Europe with a shock wave felt throughout the Continent.

Until the Russian elections brought the ultranationalist right so near to power, these scenarios seemed no more than dark fantasies. We hope they will never be realized. From now until the turn of the century, Eastern Europe will remain in turmoil, while Western Europe concentrates on welding itself into a single economic and (in a limited way) political community. Throughout this period, we face the threat of synergy on the right, with ultranationalism in Russia, Germany, and Eastern Europe all feeding on the successes of neighboring movements. It could be a violent time.

Yet by 2000, the environment will be changing. From the West, investors will be helping to create new prosperity in an Eastern Europe that has largely made the transition to capitalist democracy. From the East, according to the Forecasters Advisory Board, a stable, economically viable Russia should be providing oil, raw materials, and vital markets for the nascent economies of its former client states. Though trouble spots will remain, all the economic trends are promising. And, if Europe prospers economically, it may have the wherewithal to absorb the refugees, asylum seekers, and the vitriol of the ultra-nationalists and the extreme right.

However, all this is predicated on political stability for without stability, investment will flee. Prosperity, too, easily could be sabotaged by the volatile situation in the Balkans and the danger of another Balkan War which would breed new ethnic atrocities that would ignite the social tinder that still threatens much of Europe.

A key factor for future stability is whether the former Soviet Union will be able to resolve its ethnic and inter-republic crises peacefully or will it drift into chaos, internecine warfare, the effects of which could spill over its borders and significantly affect the economies and political stability of West Europe. But these are

imponderables beyond the scope of this book. For us, the bottom line is that economics, ethnicity and irredentism ultimately will determine the future course of European terrorism.

The Former Soviet Union

The former Soviet Union stretches across 8.5 million square miles of mountains, farmland, desert, and tundra, an area more than twice the size of the United States. Some 285 million people inhabit this vast land, representing well over one-hundred ethnic groups. They speak two-hundred languages and dialects. Despite seventy years of Marxist atheism, they practice religions from Russian Orthodox Christianity to Buddhism, Judaism, and all flavors of Islam. Yet virtually all have two things in common. Freed from Soviet rule, they are rediscovering heritages that Stalin and his followers were determined to obliterate. And they hate their neighbors. Many hate them enough to kill.

India has already shown what happens when an empire dies. Ancient rivalries are reborn. Minorities long suppressed by the colonial power begin to long once more for homelands of their own. Violence flares. Bombing, assassination, riot, and outright insurrection spread throughout lands where people suddenly are free to act out hostilities once hidden. Given a sufficiently complex mix of ethnic, religious, and cultural forces, chaos reigns.

Few regions hold so complex a stew of incompatible peoples as the former Soviet Union, or face such predictable results. In their first three years of independence, the fifteen erstwhile Soviet republics have partitioned themselves into 27 approximately autonomous countries. There have been two wars between states or republics and five civil wars, most of which have yet to be settled. Another dozen or so ethnic hostilities appear to be sidling up to war. Assassination, bombing, and hostage-taking--all the weapons of terrorism--characterize many of these conflicts,

though here it is even more difficult than usual to decide where terrorism shades into mere crime on one end of the spectrum and insurrection on the other.

Only devout humanitarians would care what happens in such distant, isolated lands if not for several unique circumstances. Russia still maintains close symbolic and practical ties to nearly all its former colonies; anything that destabilizes them also destabilizes their giant neighbor. Even in the post-Cold War era, that is no small concern. Some of these nascent countries possess nuclear, chemical, and biological weapons left over from the Soviet arsenal; Kyrgyzstan and Turkmenistan reportedly hold between them some 1,500 nuclear warheads and one-hundred ICBMs, more than France possesses. Either those weapons or the knowledge required to build them could easily fall into irresponsible hands. And the Caucasus and the Central Asian Republics are home to large Muslim populations. They could prove receptive to violent Islamist extremism exported by Iran and Afghanistan, which lie just over the border to the South. What today are obscure, local conflicts might tomorrow cause global terror.

MALICE AFORETHOUGHT

To a large extent, it was Joseph Stalin who bequeathed this chaos to his successors, and perhaps the rest of the world. In an attempt to weld the Soviet Union irreversibly into one empire, he established fifteen "union republics," many of them cobbled together from lands previously independent. Each received its ration of autonomous republics, regions, and districts within it. Some ethnically homogeneous regions were divided between republics, and ethnic groups were uprooted and resettled far from their hereditary homelands. When Stalin was done, few areas of the Union were without a large ethnic minority, and often more than one. Native peoples seldom had much use for the newcomers, and the immigrants often detested them in return. Only 53 of the estimated 128 ethnic groups in the Soviet Union

received their own autonomous homelands, and only 27 of these regions contained a plurality of the ethnic group given title to the land. In most, ethnic Russians deemed loyal to Moscow made up a large minority bloc. So it has remained. Russians make up nearly 12 percent of those living in Belarus, more than 30 percent in Estonia and Latvia, 22 percent in Ukraine and Kyrgyzstan, and nearly 38 percent in Kazakhstan. (Kazakhs make up only 40 percent of the population in their own homeland.) Nearly 24 percent of those living in Tajikistan are ethnic Uzbeks. In Moldova, some 14 percent are Ukrainian. These often are volatile mixtures.

To make dissolution even more difficult, Stalin parceled out the national economy between the republics. Belarus, Moldova, and fertile Ukraine became the Soviet Union's breadbasket. Armenia, Georgia, and Azerbaijan provide tea, citrus fruit, cotton, and other crops requiring a temperate climate. Latvia and Lithuania became centers of heavy industry, but like other republics were, and are, forced to depend for oil, gas, and coal on Turkmenistan, Azerbaijan, and Russia. Russia could survive on its own resources, and Ukraine might grow enough grain and produce to trade for its needs. Few other republics can hope to survive as independent states.

The result is what Stalin must have intended: a region the size of a continent where the price of sovereignty is ethnic and political chaos. Well beyond the turn of the century, the former Soviet Union will still be fighting its post-imperial battles.

The issues leading up to many conflicts in the former Soviet Union, and governing their likely results, become rather complicated. Yet over all, their ultimate implications are clear. The following account leans heavily on the work of Dennis Pluchinsky, Senior European Analyst with the Office of Intelligence and Threat Analysis at the State Department's Bureau of Diplomatic Security. His recent studies form the most complete and authoritative analysis of this region now available.

A CATALOG OF CONFLICT

The longest-running war in the former Soviet Union is, of course, the one being waged in Nagorno-Karabakh, some 1,700 square miles of undeveloped, mountainous land in Azerbaijan, twenty miles from the border with Armenia. This is disputed territory only because its population is more than three-fourths Armenian—one of the ethnic time-bombs that form Stalin's chief remaining legacy. Armenians and Azeris lived together peacefully for decades, as did Muslims, Croats, and Serbs in Bosnia-Herzegovina, under Tito's iron fist, until Moscow began to lose control of its empire. By late 1989, militias were forming throughout the region, each side receiving aid and arms from its ethnic homeland. Toward the end of 1993, four years of fierce combat had produced over 15,000 dead and sent more than 1 million refugees in search of safer territory. Armenia controlled something more than 3,000 square miles of Azerbaijan, including all of Nagorno-Karabakh. Fighting continued.

Eduard Shevardnadze's Georgia is in worse condition yet. Until recently, it suffered not one war, but three. Two remain active, and the Tbilisi government appears increasingly fragile.

In the East are the remains of between 2,000 and 3,000 troops loyal to the memory of Zviad Gamsakhurdia, the country's first democratically elected president, who was overthrown in January 1992 and committed suicide the following year, when it appeared that troops loyal to the government of Eduard Shevardnadze would soon defeat his forces. In addition to small, conventional battles, the "Zviadists" used guerrilla warfare and terror in their attempts to restore Gamsakhurdia to office. In May 1993, they bombed a power station in the northwestern corner of Georgia, cutting off electricity to nearly half the country. In June, they attempted to kill the leader of an opposing paramilitary group, using a remotely-

triggered car bomb; five bystanders died in the blast. A second car bomb several days later killed another prominent anti-Zviadist. In order to protect rail links crucial to Russia, Moscow sent its own troops into eastern Georgia. Though the Russians at first seemed favorably inclined toward the Gamsakhurdia forces, they ultimately supported Tbilisi. Though that war is now over, it still is unclear whether the former Zviadists can be reintegrated into Georgian society. Survivors of the rebel army might persist as terrorists, insurgents, or simply bandit gangs.

The remaining wars in this republic spring from Georgia's complex ethnic mix. Stalin set up three autonomous areas inside Georgia: Abkhazia, South Ossetia, and Adzharia. Though named for the Abkhaz, Abkhazia is dominated by Georgians. In South Ossetia, Ossetians are the dominant ethnic group; North Ossetia, part of the same nation by historical, cultural, and ethnic ties, lies across the border in Russia. And Adzharia packs Christians and Muslims--all ethnic Georgians--into uneasy proximity. Abkhazia and South Ossetia have always been allied with the Russians and the Communists. Neither has been comfortable with the rise of Georgian nationalism.

Abkhazia at first settled into a war of words and laws. Like many other competing authorities in the waning days of the Soviet empire, the legislatures took turns at restricting each other's power and nullifying the opposing side's latest edict. Information is scarce, but it seems that active war broke out when Shevardnadze's government sent Georgian national guard forces to Abkhazia, ostensibly to combat Zviadist operations in the region. At the end of 1993, the toll stood at 4,000 dead, 10,000 wounded, and 50,000 refugees. Abkhaz forces appeared to be gaining the upper hand against Georgian government troops, possibly with aid from Russia.

In South Ossetia, the divisions run even deeper. Two-thirds of the population are Ossetians, the remainder Georgians, with a few Russians to leaven the mixture.

Culturally and linguistically, the Ossetians and Georgians have little in common. Historically, what they share is mostly blood. During the turbulence that followed the Russian revolution, the Ossetians were loyal to the Bolshevik cause and on several occasions did battle with Georgian Mensheviks. When Stalin made South Ossetia part of Georgia, he guaranteed future unrest.

Like the Abkhaz, the pro-Communist Ossetians viewed the rise of Georgian nationalism with alarm, and with reason. Shortly after the nationalist Gamsakhurdia took power, Georgia revoked South Ossetia's autonomy. The Ossetians responded by declaring their sovereignty.

Ethnic riots followed, and first Russian troops and then Georgians occupied the regional capitol of Tskhinvali. When the Georgian militia left the city early in 1991, three years of guerrilla war began. At the end of 1993, an uneasy truce had been declared. A growing movement to reunify the two Ossetias, strongly opposed by the Shevardnadze government, raises the likelihood of renewed fighting. This time it could involve Russia.

In Moldova, Stalin's ethnic tampering, aided by history, has caused further turmoil. Before Stalin, there was no such place as "Moldavia," as it was first known. Stalin carved it out of Romania in 1940, later adding parts of Ukraine and the Slavic territory of Trans-Dnestr. Later still, he turned much of the Romanian section of Moldavia over to Ukraine. Two-thirds of the population in the final state is made up of ethnic Romanians. Ukrainians make up another 14 percent, Russians 13 percent, and Gagauz about 3.5 percent. The Ukrainians and Russians are concentrated in the Trans-Dnestr, the Gagauz in a region called, appropriately, Gagauzia.

Trouble began in Trans-Dnestr in 1990. Only 40 percent of the region's population are ethnic Romanians; nearly all the rest are Ukrainians and Russians whose sympathies traditionally lie with Moscow. Shortly after the nationalist Moldovan

Popular Front took power, the Russian communists who still ran the Slavic region declared sovereignty as the Dnestr Soviet Socialist Republic. Tensions remained under control until the attempted coup in Moscow in late August 1991. Moldova responded by withdrawing from the Soviet Union. Trans-Dnestr, in turn, moved to displace Moldovan authorities. The two would-be governments went to war at year's end. After seven months of fighting, in which an estimated 1,000 people died, they signed a cease-fire.

Moldova faces another ethnic problem with the Gagauz. A Turkic-speaking people, the Gagauz are nonetheless Christian. Even in their homeland, they make up only 40 percent of the population. Nonetheless, in the face of Moldovan nationalism, the region declared both its independence and its intent to remain part of the Soviet Union. Late in 1993, no major hostilities had yet broken out.

To date, not one of these conflicts has really come to an end. Even where cease-fires remain in effect, the calm is unstable, the underlying issues nowhere near resolution. In most cases, it is difficult to see how they can be resolved, save by further bloodshed.

In Azerbaijan, there is only one issue, and it is depressingly clear. The Armenians of Nagorno-Karabakh will settle for nothing less than complete independence, and probably union with Armenia itself. No Azeri government is likely to grant them either. The battle will go on until one side or the other finds itself unable to fight. If the Armenians lose in full-scale warfare, they will resort to terrorism, as so many other minorities have done before them.

In most of Georgia, the situation is approximately the same as it has been since the defeat of Zviad Gamsakhurdia. Abkhazia may yet win its independence, but is unlikely to receive it short of military victory. And South Ossetia appears determined to reunite with the north, the Georgian government intransigent in its refusal

to give up its hold on the region. In the end, Russia may have the final word in all these conflicts. Its troops are already in Georgia, and there seems little government forces could do if they decided to weigh in on the side of the opposition.

Moldova is a special case, because in these conflicts not only are Russian troops present, it is clear which side they prefer to win. The 9,000-man Russian 14th Army has lived in Trans-Dnestr for nearly half a century; in that time, many of its members have put down deep personal roots in the region. During the active fighting, the Russians gave aid and arms to the secessionists, and the 14th refuses to leave Moldova until an agreement over Trans-Dnestr's future is reached.

Russia may have another goal in mind as well. The State Department's Dennis Pluchinsky points out that the 14th Army represents a threat, both to Moldova, which longs someday to reunite with Romania, and to Ukraine. The Trans-Dnestr conflict could be a useful tool, forged to give Moscow an advantage over two potential competitors. In this view, Gagauzia is a second tool of the same general design. Both conflicts, Pluchinsky believes, "should be seen not as ethnic conflicts, but as 'islands' of communist rule that are clashing with more democratic, reformist, and nationalist forces in Chisinau."

THE RUSSIAN FEDERATION

It used to be that as Russia went, so went the Soviet empire. Today, it almost seems that as the Soviet Union has gone, Russia may be about to go.

The Russian Federation is home to about 150 million people, of whom 85 percent are ethnic Russians. That last fifteen percent consists of no fewer than 128 distinct nationalities and ethnic groups, many of them either displaced or living with neighbors imposed upon them by Stalin and his successors.

Structurally, the Federation is divided into 22 republics. Within many republics, and often surrounded by them, are the autonomous regions, most of them domi-

nated by a single ethnic group. Like the people of South Ossetia, in Georgia, and Nagorno-Karabakh, in Azerbaijan, virtually all of these peoples are dissatisfied with their place in the Russian Federation. No fewer than 210 ethnic and ethnically based territorial disputes have been catalogued within what Moscow considers to be Russia.

Exactly what Russia is, or will be, few can agree. North Ossetia and Ingushetia have threatened to leave the Federation. Tartarstan and Chechenya have already done so, though it is not clear how much practical effect their declarations have had. Other republics have unilaterally cut their tax payments to Moscow. Several autonomous regions have declared themselves republics within the federation; even by Moscow's rules, they will get to keep more of their tax money as republics than as lesser divisions. Yet declarations of regional independence are more than a tax dodge. They represent the will of peoples who feel they have been dominated by Moscow, and by Russians in general, for much too long.

Squeezed between the fighting in Georgia and Azerbaijan, the North Caucasus is one the most complex and unstable masses of ethnic rivalry in the former Soviet Union. Here lie Chechenya, the first republic to secede from the Russian Federation; North Ossetia, with which Georgia's South Ossetians hope to reunite; Ingushetia, which fought North Ossetia in the region's first post-Soviet ethnic battles; and five other republics almost equally troubled. As a group, they have formed the Confederation of Caucasian Peoples, which actively supports South Ossetia and Abkhazia in their attempts to secede from Georgia.

In this area, it is difficult to identify terrorism with any certainty. Almost any shooting or bombing that involves a public official could be politically motivated; just as easily, it might be simple crime or personal vengeance. The Caucasus has a long tradition of gangsterism, government corruption, and blood feuds.

Chechenya and Ingushetia formed a single republic throughout most of the Soviet period. They share a troubled history. During the Second World War, German troops occupied most of the region. After VE Day, on little or no evidence, Stalin accused many of the Caucasian nationalities of collaborating with the enemy and deported the Chechen and Ingush--400,000 and 90,000 people, respectively--to Kazakhstan and Uzbekistan. Khrushchev allowed them to return in 1957, but by then others had occupied the land. Chechen and Ingush nationalist groups appeared in the late 1980s, took power in 1991, and quickly declared independence. Ingushetia split off from Chechenya in June 1992. The two new republics agreed to table the question of where to fix the disputed border between them.

To date, Ingushetia appears fairly stable; Chechenya has not been so lucky. Encouraged by Moscow, which still considers the new countries part of the Russian Federation, opposition to the elected government of Maj. Gen. Dzhokhar Dudayev is building. Reported incidents of terrorism and low-intensity conflict in 1993 include a bombing, a riot that left forty dead, and at least three assassinations. No doubt others have gone unnoted by outside observers.

Nearby Dagestan is home to no fewer than 32 ethnic groups, five with ten percent or more of the population, speaking twelve official languages, all in a republic of less than 20,000 square miles. In the twelve months ending in April 1992, it witnessed two railroad bombings, a hostage taking, the murder of a nationalist leader, and the attempted murders, by bomb and gun, of six government officials, including the Prime Minister and the Deputy Prime Minister. Though only one attempted murder was claimed by a political organization, onlookers assume that most of the violence was aimed at driving former communists from power. Democratic, reformist, and Islamic groups all want them out.

To date, inter-ethnic violence has been remarkably rare in Dagestan, but at least three groups have serious historical grievances that could yet trigger bloodshed:

When the Chechens returned home after Stalin's exile, the Laks and Avars had settled in what had been Chechen territory. The Chechens accordingly were resettled in neighboring regions. They still want their ancestral land back. In 1992, the Laks agreed to vacate and settle elsewhere. The decision eased one potential conflict.

It sparked a second. Unfortunately, the Laks were moved into territory that historically belongs to the Kumyks. Several other peoples had already been resettled there, so the Kumyks are now a minority in their own homeland. A Kumyk nationalist movement called Tenglik ("Equality") is beginning to agitate for some form of autonomy within a new Dagestan federation. Tensions are rising, and minor incidents of violence have been reported.

The Lezgins still live in their own homeland, but it has been partitioned between Dagestan and Azerbaijan for more than a century. Rumors suggest that a Lezgin nationalist movement known as Sadval ("Unity" in the Lezgin language) may soon begin an armed insurrection in Azerbaijan, hoping to restore a united Lezgin homeland.

Then there are the Nogay. Genocidal pogroms in the late 18th century killed many and exiled most of the rest exiled to Romania, Afghanistan, and the Near East. Only 28,000 Nogay remain in Dagestan, another 47,000 in Chechenya and the Stavropol Kray. The original Nogay territory has been split between the three republics. The Nogay national movement--Birlik, or "Unity" in the Nogay language--hopes to reunify it as an autonomous republic within the Russian Federation. Dagestan, Chechenya, and the Stavropol Kray have refused to give up their claims to it.

The brief war between North Ossetia and Ingushetia took place in October 1992, but in a real sense it began almost half a century earlier. Again, the conflict was Stalin's doing. In 1944, while using almost any pretext to deport other Caucasians, Stalin rewarded the Ossetians for their conspicuous Communist loyalty by giving them a piece of the territory formerly occupied by the Ingush. The Ossetians and Ingush have done occasional battle over the Prigorodny region since the late 1950s. In the latest round of fighting, more than 680 people died, 315 were listed as missing, and 70,000 fled the area. Two units of Russian paratroopers have been stationed there since November 1992 in an attempt to maintain a cease fire agreed to in that month. They have had only limited success.

Terrorist-style assassinations are common in the battle for the Prigorodny area. Since 1982, gunmen have killed several prominent leaders, including the Interior Minister of North Ossetia; the Russian general in charge of the troops at Vladikavkaz, the North Ossetian capitol; and Russian Deputy Prime Minister Viktor Polyanichko, Moscow's regional governor for North Ossetia and Ingushetia.

There are more than ethnic conflicts to cause violence in all these sections of the Caucasus. Both Dagestan and North Ossetia, recall, still are ruled by unreconstructed communists who reject any suggestion of change; it seems that at least some of the violence in these areas is the work of reformers determined to bring democracy any way they can. The Nagoy territory now split between Dagestan, Chechenya, and the Stavropol Kray is rich in farmland, grazing fields, and oil, one more reason its current rulers are determined to keep it. And throughout the Caucasus there is Islam. In North Ossetia, the vast majority are Eastern Orthodox Christians; the Ingush are Sunni Muslims. So are the Chechin. The population of Dagestan is 85 percent Muslim. Though the Sunni have been much less receptive to violent Islamism than the Shi'ites, there are signs that radical fundamentalism is

beginning to win followers among the Mid-Eastern Sunni. Similar conversions in the Caucasus may not be far off.

THE CENTRAL ASIAN REPUBLICS

Radical, violent Islamic fundamentalism is already infiltrating the former Soviet Union from the South, over the borders with Iran, Afghanistan, and Pakistan into the Central Asian Republics. In all the former empire, this is the most fertile ground for the Iranian brand of politicized Islam. There are only 11 million Christians here, most of them resettled Russians and Ukrainians. The rest are Muslim. Ethnic ties across these artificial borders are strong as well. There are more Azeris in Iran than in Azerbaijan, more Tajiks in Afghanistan than in Tajikistan. Uzbeks, Kazakhs, and Turkmen spill across the former Soviet border into Iran, Afghanistan, and China.

This part of the former Soviet Union stretches from Turkey in the West almost to Mongolia in the east. At least five new countries occupy it: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan; most authorities include Azerbaijan as well. Their combined population is more than 55 million. Kazakhstan alone is larger than Western Europe. Kazakhstan and Azerbaijan stand over vast reserves of oil and gas. Azerbaijan also possesses significant mineral deposits. Turkmenistan and Uzbekistan are rich in uranium. And, of course, there are nuclear, chemical, and biological weapons inherited from the Soviet Union. The fate of the Central Asian Republics is a global concern.

None of these lands is stable. All but Kyrgyzstan retain authoritarian governments run by entrenched communists, now flying nationalist banners; here too underground democratic movements are working to drive the apparatchiks from power. In this region also there are ten territorial disputes and a host of potential ethnic conflicts. In Uzbekistan, the Bukhara/Samarkand, Fergana, and Tashkent re-

gions all vie for power. In Tajikistan, four regions compete for economic resources and political power: Gorno-Badakhshan, Kulyab, Kurgan-Tyube, and Leninabad.

The war for Nagorno-Karabakh is only one conflict where blood already flows. In June 1992, battles between the Uzbeks and Kyrgyz of Kyrgyzstan killed 320. Between May and November of 1992, a civil war against Tajikistan's communist government left more than 20,000 dead.

In Tajikistan, Iran and Afghanistan play key roles. Combined Tajik and Afghan forces regularly attack across the Afghan border. Saudi Arabia, Sudan, and Pakistan fund the operations. Afghanistan's mujaheddin guerrillas supply the otherwise moderate Tajiks with combat experience and religious fervor.

Since late 1992, 20,000 Russian troops have patrolled the Afghan border, trying to block the attacks. Much depends on their success. The boundary between Tajikistan and Afghanistan falls along a river and forbidding mountains. If the guerrillas cannot be halted at these natural barriers, there is little to stop them from conquering all the Muslim republics. So far, the issue is in doubt.

CONSEQUENCES

These many conflicts, individually and as a pungent mass, raise at least four possibilities that could cause the United States grief in the next ten years. All could bring new terrorist threats or greatly aggravate some dangers that already are too familiar. Some almost surely will. Most future terrorism in the former Soviet Union will remain within the region. Some may attack the West, either in its local outposts or at home. None will be without international results.

Destabilizing the Russian Federation simultaneously has the greatest implications for the rest of the world and the least immediate impact on terrorism. Already, the collapse of the Soviet empire has created a nationalist backlash in Russia. Such formerly Communist publications as Pravda and Sovetskaya Rossia now hew to the

ultra-nationalist line. True believers abound in the middle levels of the Russian Army and the former KGB. And as the world discovered in the parliamentary elections of December 1993, even the right wing lunatic fringe has powerful support. The sight of ethnic and political violence in what until recently seemed as much parts of the same country as, say, Missouri appears to a New Englander can only breed more sympathy for the nationalist right.

There seems little immediate chance of a right-wing takeover in Russia. More likely is a "rolling coup" in which the ultra-right foments riots and civil disturbances that are joined by elements of the military to force major concessions and, reduce Yeltsin to a mere figurehead or remove him and other reformers from office entirely. It would be "death by a thousand cuts." More probable, growing strength on the right will continue to force the Yeltsin government, or a successor, to modify its generally reformist stance, as it has done often since the Gorbachev era. One result could be more intervention in the ethnic conflicts of former vassal states. This is sure to breed terrorism against Russian installations and forces. Most will occur locally, where Russians are most accessible to the terrorists. However, there is a significant chance that terrorists will reach out to more visible, less well defended targets abroad. This is especially a threat in the Central Asian Republics and the Muslim areas of the Caucasus, where Iranian sponsors already are skilled in international terrorism. Russian embassies and consulates in Western Europe and the United States are logical sites for attack. In that case, Americans would surely be affected, if only as bystanders.

Paradoxically, the prospects might have been marginally worse for immediate American interests if the reformers could have operated without serious opposition. If political and economic reforms in Moscow proceed despite recent election results, they will not ease the ethnic and territorial conflicts that abound almost within

sight of Moscow. Yet American businessmen will continue to pour into the former Soviet Union, seeking developable resources and potential trade. Some will wander in harm's way. To any terrorist, they will represent an obvious chance to win global publicity for the cause. Occasional kidnappings seem inevitable. If terrorists view the United States as supporting the unwanted regime, Americans could become targets, not just for publicity, but in order to change U.S. policy. Again, the Central Asian Republics and the Caucasus appear most likely to breed this kind of attack. Criminal intent is a far more likely motive for kidnapping Americans. The Russian and other ethnic mafias likely will engage in such operations either to secure large ransoms from American corporations, or to ensure local contracts are awarded to companies they control or to acquiesce in other extortionate schemes. The nexus of organized crime, robber baron capitalism, and free-lance KGB and military entrepreneurs has produced a Darwinian form of free-enterprise on the model of Jurassic Park.

At this point, most of the questions about the former Soviet Union revolve around one man, extreme nationalist leader Vladimir Zhirinovsky. Zhirinovsky's proposals include the abrogation of all treaties with the West; the annexation of Finland, Poland, and Alaska; and the invasion of the former East Germany in a kind of nuclear blackmail for Western economic aid. His rhetoric contains ideas even more ominous:

With regard to Russia itself, he states, "The Liberal Democratic Party stands for the restoration of the Russian state in the borders of the former U.S.S.R."

On Germany: "History has shown that in Europe, our faithful ally should have been Germany. We could have avoided the two world wars with them. We needed a war against France."

On Lithuania: "I'll bury radioactive waste along the Lithuanian border and put up powerful fans and blow the stuff across the border at night....They'll all get radiation sickness. They'll die of it. When they either die out or get down on their knees, I'll stop."

On dictatorship: "I say it quite plainly: When I come to power, there will be a dictatorship. I will beat the Americans in space. I will surround the planet with our space stations so that they'll be scared of our space weapons. I don't care if they call me a fascist or a Nazi....I may have to shoot 100,000 people, but the other 300 million will live peacefully."

On Jews: "From time to time, Russia is overwhelmed with anti-Semitism. This phenomenon is provoked only by Jews themselves."

Zhirinovsky's victory in the parliamentary elections is important as a symbol, but it may have less practical effect than his popular vote seems to suggest. The new Russian constitution leaves power firmly in Boris Yeltsin's hands. If the parliament becomes too obstructive, Yeltsin can simply dissolve it after a year and call for a new election. And polls suggest that, while Yeltsin may not be regaining his popularity, Zhirinovsky at least may be losing his. That slide may be accelerated by the recent news that Zhirinovsky was born Vladimir Eidelstein. He denies Jewish parentage, but public discovery of his Jewish surname has been a significant embarrassment for the professional anti-Semite.

If Zhirinovsky is serious about his stated policies, and can retain his following, the real trouble could come in 1996, when Yeltsin has promised to step aside and permit a presidential election. Zhirinovsky claims to be 90 percent certain that he will beat Yeltsin to become the next president of Russia. If his popularity stabilizes, Zhirinovsky could wield the constitutional power Yeltsin intended for himself. It

could be very difficult to rein in a xenophobic nationalist armed with Russia's nuclear arsenal.

In either scenario, reformist or radical-nationalist, one threat for global terror stands out. The Soviet Union left behind not only nuclear warheads and stockpiles of chemical and biological weapons, but scientists, engineers, and technicians who know how to build and use them. Many, perhaps most, are either unemployed or severely under-employed. Iraq and North Korea have demonstrated clearly how determined to secure weapons of mass destruction the world's rogue states can be. Countries with smaller ambitions, but difficult security problems, could also find them inviting. Even terrorist organizations could find it within financial and technical reach to develop their own chemical or biological threat. For all these potential actors, the easiest route to their goal is through hiring expertise that in the former Soviet Union now almost literally goes begging. Weapons experts with too little to eat and families to feed could see little alternative to selling their skills to the highest bidder. This is an even greater concern in the area of chemical weapons than in nuclear technology: the experts are easier to find, the development work is incomparably cheaper, and the Soviet program may well have been the most advanced in the world. Over the next decade, this will be the most pressing risk for the spread of nuclear, chemical, and biological weapons.

Finally, there is the problem of radical, violent Islamic extremism. The Muslims of the Caucasus and the Central Asian Republics have always been concerned more with daily life and regional conflicts than with the world beyond. So far, it is difficult to judge how much appeal the Iranian variety of politicized, expansionist Islam will hold for them. Teheran certainly is trying to cultivate potential followers in the area. Between 1991 and 1992, the number of mosques in Central Asia exploded from only 160 to more than 5,000! Many have been established with Iranian

support, and growing numbers are staffed by Iranian-trained clerics. Iran is building practical ties as well. It has signed a joint exploration agreement with Azerbaijan, seeking oil and gas around the Caspian Sea. Turkmenistan has agreed to buy its oil from Iran, rather than from Russia. Iran is beginning to import minerals from Kazakhstan. And with Azerbaijan, Kazakhstan, the Russian Federation, and Turkmenistan, it has signed the Caspian Sea Pact, an economic-cooperation agreement aimed at building regional trade. The possibility that Teheran will forge a close relationship with nuclear-equipped Kazakhstan in particular is laden with ominous possibilities.

Several factors will slow the spread of radical Islamism. One is the extreme diversity of the formerly Soviet population. In the Caucasus, Muslims often live alongside large Christian populations, who would hardly welcome an Iranian-style Islamist government. Further, most of the Muslims are Sunni and view the Shi'a with suspicion. In the Central Asian Republics, the Azerbaijanis are Shi'ite, like the Iranians; but unlike the Iranians, they do not speak Persian. The Tajiks speak Persian, but Shi'ites are a minority; many are Ismaelian, a Shi'a subsect that gave up terrorism in the 13th century and today is even milder than the Sunni. The Kazakhs are Sunni and speak a Turkic language. Most of the remainder are Sunni, with a long tradition of Sufi mysticism that sets them even further apart from politicized Islam.

The absence of a charismatic leader has also slowed the spread of Shi'ite extremism. Even with the hated Shah as an impetus, the Islamist cause triumphed in Iran largely on the personal appeal of the Ayatollah Khomeini. Islamist movements throughout the Middle East have built largely on the momentum he achieved. There is no reason to assume that this momentum will carry them over the Caucasus and the Pamirs. That could change rapidly if a leader appears within the region.

Turkey represents a formidable obstacle to the radical Islamist cause. Roughly 45 million people in Azerbaijan and the Central Asian Republics are ethnic Turks, and secular Turkey retains a strong cultural influence among them. Turkey has worked hard to establish closer ties with the Central Asian Muslim countries. It recognized Azerbaijan's independence even before Iran did and was among the first to recognize the region's other new states. Since then, Turkey has built a strong trade with Azerbaijan, exchanging consumer goods and machinery for Azeri oil and gas. It has also offered to help the Central Asian Republics discard the Cyrillic alphabet and replace it with Latin script, a process Turkey itself underwent in 1928. Turkish television has been broadcasting throughout Central Asia since April 1992. This secular influence is so powerful that Iran reportedly is afraid it will cross the border to infect its own Azeri population.

Though Turkey represents an important stabilizing factor in the former Soviet Union, its role brings with it the risk of growing friction with Iran. Already, the Iranian fundamentalists view Turkey's secular culture as an intolerable challenge to their politicized version of Shi'a Islam. Turkey has faced a smoldering Kurdish insurrection for years. A Shi'ite rebellion would not be difficult to provoke. Both could gain covert support from Iran, if Teheran has not already volunteered it. If Turkey seems to be winning the competition in the former Soviet Union, Iran will take any opportunity to discomfit its opponent. Violence in Turkey itself would be joined by attacks on diplomats and facilities abroad. American personnel and installations in Turkey inevitably would become prime targets as well. In all the former Soviet Union, this distant implication may be the most direct and probable terrorist threat to American interests in general and those of the Department of Defense in particular.

One last potential concern remains to be discussed. To date, we have no evidence that it is being realized, or that it ever will be. Yet it is a small logical step from current circumstances to this future problem, and there seems little excuse to hope that others will fail to take it. The implications for Third-World stability are grave, and worst where America's interests soon may be growing most quickly, in Latin America.

Throughout what used to be the Russian empire, much of the older generation has been unable to make the leap from Soviet socialism to democratic capitalism. Many still believe in the Marxist ideals they were taught from grammar school onward. For them, the evils of socialism truly were an uncomfortable but necessary stage on the way to a society of true equality. Government of, by, and for the proletariat had been delayed, largely by the evil machinations of the United States and its capitalist henchmen, but someday it would be achieved. Others among the disaffected were simply loyal apparatchiks, who lived decently in an otherwise poor land, thanks to their place in the vast bureaucracy that answered to Moscow. Some are soldiers, their careers cut short by the dissolution of the country they served. Some were cynical exploiters, building their dachas on the backs of poverty-stricken countrymen. The democratic revolution has cost all four groups their security, their role in society, and in most cases their income. The most dedicated or desperate among them may be searching for a place to rebuild what they have lost, either a land where the Marxist dream can be reborn or one where they themselves can build a prosperous new life. Some probably will find it in Latin America.

As we will see in the next chapter, Latin America is still the reluctant home of revolutionaries and terrorists ranging from devout Marxists to cynical drug lords. Many used to depend on training and technical help from the Soviet Union and Cuba. Now both sources have been cut off, and the terrorists need replacements. It

Latin America

Since the dawn of modern terrorism in 1968, groups from the Middle East have captured American attention. Yet it is in Central and South America that terrorism is most active and most often directed against U.S. interests. According to the U.S. State Department, in 1993 there were only some 15 incidents of anti-American terrorism in all the vast distance from the Near East to India. In Latin America, terrorists attacked foreign interests on 97 occasions; 68 of those incidents involved Americans or American interests.

If these events remain little known, it is probably because Latin American terrorist operations seldom result in a large number of casualties. (The major exception was the 1992 bombing of the Israeli embassy in Buenos Aires, which was planned and carried out by Hezbollah terrorists from the Middle East, most probably supported by Iranian state agents) and they rarely occur within sight of television cameras. South American governments tend to keep reporters away from their most volatile regions, and few newsmen would willingly spend much time at remote support camps along an endangered oil pipeline, even if given the opportunity.

Most terrorist attacks in Latin America continue to be directed against domestic targets, such as government personnel and institutions, the economic infrastructure, and the local security forces. Terrorist and guerrilla groups increasingly are turning to kidnappings and other crime-for-profit enterprises in order to raise funds. We expect this trend to accelerate and the distinction between pure terrorist/insurgent groups and criminal gangs/cartels to increasingly blur.

Leading the list are Peru and Colombia which are wracked by continuing violence carried out by insurgents, terrorists, and the drug cartels. U.S. government representatives involved in narcotics control efforts will remain at risk as long as aggressive counter drug programs remain a centerpiece of our Latin American policy. Latin American terrorists continue to target foreign religious missions, particularly in Bolivia, Peru and Chile. The Mormon Church, in particular, has long been victimized and is portrayed by radical elements as an "agent of U.S. imperialism." American companies that seek to develop Latin American natural resources are favored targets and their personnel will continue to be at risk.

The threat to U.S. government facilities and personnel remains significant. American business interests, religious organizations, and American tourists are extremely vulnerable and, therefore, more likely to be attacked by any group wishing to make a political statement. For these reasons, Latin American terrorism represents a continuing and evolving challenge.

The problem is most immediate, of course, and most directly connected to U.S. interests in Mexico, where decades of oligarchical rule, subjugation of the Indian population, centuries of grinding poverty, and extreme disparities in income and land distribution, finally erupted into open warfare in Chiapas. Since then, signs of instability have appeared in profusion throughout Mexico. Gunmen kidnaped Alfredo Harp Helu, president of Banamex, the nation's largest bank. The success of the Zapatista rebellion appears to have triggered a wave of strikes and demonstrations across the country, with Indians in Oaxaca and Guerrero demanding the same kind of concessions that Mexico City granted the Zapatistas. And, of course, there was the murder of Luis Donaldo Colosio, the ruling Institutional Revolutionary Party's (PRI) anointed successor to President Carlos Salinas de Gortari--the first

killing of a Mexican leader since 1928. This is not the stability Salinas once hoped to build for his country.

The current unrest could be just the beginning. Mexico faces profound change over the next few years, and the plight of the poor is likely to get worse before it gets better. The North American Free Trade Agreement not only offers Mexico vast new markets for its goods, it exposes the country's businesses to the kind of pressures that American companies have contended with for most of the last decade. To compete in world markets, and even in their own against a wave of low-cost agricultural products from the United States and Canada, Mexican industry and agriculture will have to raise their productivity sharply. That means growing demand for skilled workers, but a shrinking job market for the campesinos who now till the country's fields. In the United States, it took fifty years to move from an agricultural economy to an industrial one. Mexico will have to make the same transition in ten. The process will cost millions of poor workers what little hope they have of a better life.

At the same time, Mexican expectations have been rising. The Salinas administration has finally brought the country's debt under control, lowering tax rates in the process. More efficient antipoverty programs have been improving the lot of peasants who for decades had received more promises than help. And the Salinas government's peace accord with the Zapatista rebels promised dozens of much needed improvements. Among them were more and better housing, medical clinics, and schools; more bilingual education for Indians; land and legal reform; rural electrification; and new laws to prohibit discrimination against Indians. Mexico's next administration could find it difficult to follow through on its predecessor's commitments.

If so, the Zapatista insurrection could be just the opening salvo in a bloody war of the poor and disaffected against the wealthy, entrenched minority. American business executives, factories, and even tourists would be logical targets for anyone who blames NAFTA for the loss of a job or other hardships .

There are two key indicators which should soon offer clues to Mexico's future. One is the result of the investigation into the murder of Luis Colosio. It now appears that the gunman did not act alone, but may have been part of a conspiracy. Thus far, government investigators are being extremely close-mouthed about possible motives for the murder. This has led to speculation that Colosio may have been murdered by recalcitrant members of the PRI itself, who were not willing to accept the political and economic reforms Colosio was promising. This suspicion will harden into belief unless the government quickly produces a credible explanation for the murder, backed by hard evidence. A bungled investigation or the appearance of a cover-up would convince many Mexicans that the PRI intends to retain its power at any cost and the threat of full-scale revolution will be many steps closer.

The other signpost will be the response by Mexico's opposition to the results of the national election, which soon will pick a successor to President Salinas. Though the PRI promises fair and open elections at last, there is little doubt that its candidate will become the next President. If the opposition accepts the election as the people's will, the country's future could be more peaceful than it now appears. If not, unrest is almost sure to grow.

As the old century ends and a new one approaches, the character of terrorism in the rest of Latin America seems to be changing as well. For more than twenty years, Latin American terrorist movements relied on the Soviet Union and Cuba for training, weapons, supplies, and money. That support all but vanished during the Gorbachev years, when Moscow--more concerned with American aid than with

fomenting war Marxist revolutions in South America--forced Castro to abandon his dependents as a condition of Soviet aid. At its peak, that aid amounted to one-fifth of Cuba's gross domestic product. By 1990, Moscow was demanding cash for its oil, even from its oldest and staunchest vassals, and the Cuban economy entered free-fall. This has given Castro the strongest possible economic reasons to curry favor with the United States; even if he could afford to support terrorism in South America, he would be unlikely to do so. Among several other factors, this has helped to reduce Latin terrorism in recent years. As a matter of routine, the terrorists can no longer afford to work on the grand scale.

How long that will remain true is unclear. Peru's Shining Path has long enjoyed support from sympathizers in Germany and Scandinavia. After the decline of Cuba, it labored to expand its European organization and restore its lost income, with some success. Insurgents in El Salvador also once relied on donations from the Continent and the United States. In the future, Latin America's terrorists could build closer ties with leftists outside the region to help fund more ambitious operations and to extend their political reach.

Another factor may be more important than money, however. On the Left, many terrorist organizations have lost their ideological reason for being. The electoral defeat of the Sandinistas in Nicaragua and the capture of Abimael Guzman, leader of Peru's Shining Path guerrillas, have also discouraged the Latin American left. Guzman's capture was especially telling, because he soon repudiated his commitment to violent revolution and called for a peaceful end to the Shining Path's terrorist campaign. In the words of one disillusioned leftist, "Nelson Mandela was imprisoned for twenty-seven years, and he never broke. Guzman broke in a year."

None of this means that Latin terrorism is nearing an end, however.

As the traditional Marxist organizations have lost some of their momentum, they have been supplanted, in part, by the so-called "narco-terrorists," criminal organizations with an agenda--to pursue profit unimpeded by the authorities, insured through institutionalized corruption and fear. Optimally they would function as a parallel government. They have what amount to unlimited budgets--the Colombian drug cartels are conservatively estimated to earn \$1.5 billion per year; other estimates run up to \$8 billion--and they have no qualms at all about killing the innocent. Because most of the drugs produced in South America go to market in the United States, this is one area in which terrorism directly affects American interests.

For nearly a decade, the Medellin cartel, headed by the late Pablo Escobar, ran what may have been the world's bloodiest and most successful terrorist campaign outside the Middle East. In 1984, Justice Minister Lara Bonilla was murdered by drug-cartel assassins. Lara's successor, Enrique Parejo, was murdered in Budapest, a clear message to the cartel's enemies that "You can run, but you can't hide." Low Murta, Parejo's replacement, was forced to resign for mishandling the case of Jorge Ochoa of the Medellin cartel. Low's successor, Carlos Hoyos, who strongly advocated extraditing cartel members to the United States, was kidnaped and assassinated. More recently, Justice Minister de Griefff resigned because of threats against her husband and children. Within a three-year period, Colombia had nine Justice Ministers. The assassination of three created such pervasive fear that few potential nominees would accept the job. According to Colombian press sources, between 1979 and 1989, some 220 officers of the court were murdered; between 1982 and 1989, an estimated 157 judges were assassinated. American personnel were also targeted; on several occasions, employees of the U.S. Embassy and the Drug Enforcement Administration, and their families, were withdrawn from Colombia for their own safety. But for Colombians, the most chilling incident was probably the

assassination of Liberal Party presidential candidate Galan, who was known for his hard-line anti-cartel policies.

Mass actions also formed part of the narcoterrorist strategy. In one of their more bloody and brazen operations, the traffickers parked a thousand-pound truck bomb outside the Department of Administrative Security, the Colombian counterpart to both the FBI and the CIA. Roughly one-hundred people died and six-hundred were injured in a blast that leveled the building. They also planted huge truck bombs in crowded shopping centers and other public places, detonating them during peak hours to maximize the carnage. The aim of all this slaughter was to terrorize the citizenry so thoroughly that they would force the government to give in to the cartel's demands. Chief among them was to block extradition of the "narcotraficantes" to the United States. The campaign worked. Aided by wholesale bribery and a sophisticated public-relations campaign, the terrorist war forced the Colombian legislature to amend the constitution, forbidding extradition.

With the death of Pablo Escobar--a fairly unsophisticated leader with a taste for blood--the Medellin cartel has been all but destroyed, and the narcoterrorist war is probably entering a new phase. The Medellin organization's business was already being taken over by the rival Cali cartel and other competitors. The Cali cartel has traditionally relied on wholesale bribery to achieve its goals, limiting its violence to the assassination of officials who cannot be paid off, intimidated, or worked around. For Colombia and for America, quieter times probably lie ahead.

Yet Pablo Escobar's influence on terrorism survives Escobar himself. As part of their war with the criminal-justice system, the Medellin cartel hired M-19 terrorists to attack the Palace of Justice, which houses the Colombian Supreme Court. As a result of their attack, the building was gutted, invaluable files destroyed, and twelve Supreme Court justices murdered. In the long run, this new alliance between

old line political terrorists and the drug cartels may be the most significant result of the narcoterrorist war. In Colombia, terrorists whose interests once were largely political now guard cocaine laboratories and shipments. In Bolivia, they are recruiting coca farmers to build a paramilitary organization strong enough to defend against government counterdrug forces and their American advisors. Among the terrorist groups now joining or cooperating with drug cartels are some of the most effective on the continent: the Shining Path, Colombia's National Liberation Army, and the Revolutionary Armed Forces of Colombia.

For terrorists, this affiliation has both benefits and risks. Above all, it provides a much-needed source of income to replace lost support from the Soviet Union and Cuba. However, it will be difficult for any organization to remain ideologically pure when involved in the drug trade. Corruption will reduce both the terrorists' commitment to their original causes and their distaste for American wealth and materialism. These new alliances may make it more difficult to fight drug trafficking at the source--not that these efforts have ever been conspicuously successful--but it may well reduce the danger of political terrorism in some of the most beleaguered parts of Latin America as political revolutionaries become more concerned with profit than ideology.

This transition also provides one of the few opportunities in the world in which the United States can, by its own actions, dramatically reduce the flow of cash on which criminals and terrorists depend. For domestic political reasons, it would not be easy. But in the view of the Futurist Advisory Board--there was only one dissenter--a change of policy is necessary, and by 2000 or so, the majority believe, it will happen.

According to the overwhelming majority of our Futurist Advisory Board, the United States will decriminalize most illicit drug use within the next ten years. This

change will be made largely to cut enforcement costs but, in part, to rationalize America's drug policies.

Draconian penalties have failed to stem the flow of drugs into the United States, so it is time to try something else.

At the moment, it is difficult to imagine that the United States might ever decriminalize drugs. A survey by the National Law Journal of 181 state and local prosecutors from the largest jurisdictions in the United States found that one-fourth would eliminate jail sentences for possession of marijuana, while one-fourth would decriminalize the drug altogether. Among mayors, the proportion is even higher. In the political firestorm that followed, Surgeon General Joycelyn Elders supported the study of decriminalization. Mayor Sharon Pratt Kelly, of Washington, D.C., came out in support of the idea. So did fully half of those attending a conference of big city mayors. A poll of California voters found that 51 percent were in favor of at least studying drug decriminalization. And the idea is not limited to arch-liberals. Among the earliest to support the idea of considering decriminalization were former Secretary of State George Schultz and conservative publisher William F. Buckley.

If our forecasters are correct, this is a trend, and it will soon extend to other drugs. A decade from now, marijuana will be sold and taxed as a recreational drug, much as tobacco and alcohol are today. Cocaine and heroin will be available by prescription. And the money now spent on interdiction programs will go to drug education and treatment, with much better results.

For Latin American terrorism, the implications are clear. If the United States decriminalizes drugs, it will destroy the market that now supports narcotics traffickers and some insurgent and terrorist groups. The price of drugs will drop to free-market levels, stripping the primary income from the cartels and terrorist organizations dependent on narcotics revenues. This, however, may redound to the

benefit of terrorist and insurgent groups which may find that if they represent legitimate grievances they survive--leaner and ideologically pure. Decriminalization of drugs may be the death knell for the "narcotraficantes" but could prove to be a blessing in disguise for the political insurgent or terrorist.

Though world politics have turned against the leftist revolutionaries, the problems that inspire unrest throughout the continent remain to be resolved. Even in the wealthiest, most liberal of Latin American countries the monied, influential classes form only a thin veneer atop vast majorities of landless poor. Politically repressed, with little hope of ever having enough to eat, many in Latin America will remain receptive to any would-be revolutionary who promises a better life, whether he can deliver it or not. The increasing access to television will perhaps spark more revolutions than ever did the writings of Marx and Engels. Television now reaches even the most remote and backward Indian village and offers once isolated peasants a window on the world, enabling them to see in stark relief the incredible disparity between their lives and those of the ruling elites in some distant capital. News programs offer access to developments in neighboring countries and lands far away where resort to arms has wrung concessions and even the keys to a nation from brutal and repressive governments. The Zapatista revolution in Chiapas and the ANC victory in South Africa resonate in the hearts of many who were once bereft of hope. Unless Latin America's rigidly stratified societies find some way to provide better lives for the poor, any respite from terrorism and insurgency will be short-lived.

Target USA

For all the American public hears about stabbings in Gaza, bombs in Northern Ireland, "necklacing" in South Africa, it almost seems that terrorism in the U.S. must have died with the Symbionese Liberation Army and the violent left-wing fringe of the anti-Vietnam War protest movement. America suffers violence aplenty—23,760 cases of murder and non-negligent manslaughter, more than 1.9 million "violent crimes," in 1992 alone. But these are deeds of passion or greed, or the "hate crimes" of warped minds, not acts of ideology or religious fervor. Terrorism is rare here, compared with the countries of the Middle East, Europe, South America, and Asia. Even the bombing of the New York World Trade Center was imported violence. Yet home-grown terrorism has survived into the 1990s. It threatens to prosper in the years ahead.

Terrorist causes are changing. Old ones disappear as their cadres are arrested or retire, while new ones arise to replace them. Until the mid-1980s, violent Puerto Rican nationalists were the nation's greatest internal threat; for years, they committed more than half of all political violence in the United States. But the terrorists operating on the mainland are nearly all in jail or have fled the country, while a scant few remain active on the island itself. And the Cuban anti-Castro terrorists have all but disappeared, thanks to effective law enforcement and, apparently, the recognition that with the decline of the Soviet Union Castro's days are nearing an end.

As these movements faded, they have been replaced by white supremacists, skinheads, Black Muslim extremists, violent anti-abortion activists, radical environ-

mentalists and militant animal-rights proponents. For all these causes, someone has attempted murder; for most, someone has succeeded.

The actions of the neo-fascist right usually are classified as hate crimes, a heading that emphasizes the perpetrator's emotional condition and disguises his political motives. By far the largest and most dangerous of these groups are the white supremacists and skinheads. This may in part explain why Americans seldom recognize terrorism when it occurs at home. This may be the ultimate statement of faith in the democratic process by a people generally cynical about Washington: an ingrained belief that any attempt to alter government policy by coercion must say more about the terrorist's derangement than about any broad political movement.

Among the white supremacists, the Ku Klux Klan is the oldest of the hate groups. It may be the oldest terrorist group in the world today, tracing its origins to the end of the Civil War. Arising during the Reconstruction in response to the northern "carpetbaggers," it has remained virulently racist, adding strong elements of hatred for Jews and Catholics.

The Klan's membership declined precipitously throughout the 1980s, from an estimated 11,000 in 1981 to perhaps 4,000 ten years later. Several factors combined to cause this shrinkage: the passage of legislation against hate crimes and paramilitary groups in several states; the loss of several prominent leaders, including David Duke, who went on to attempt mainstream politics; and the general prosperity of the 1980s, a condition that usually mitigates against fringe political groups. Equally important was the Portland, Oregon, court case in which the White Aryan Resistance was bankrupted by a \$12.5 million judgment awarded to the family of an Ethiopian immigrant whose murder was instigated by W.A.R. leaders Tom and John Metzger. W.A.R. survives, but after the verdict at least two major Klan organizations advised members to tone down their rhetoric and avoid violence.

The Klan itself has split, becoming less effective in the process. Like W.A.R., the United Klans of America was bankrupted by a court judgment following the murder of a young black man by its members. Its role has been taken over by at least two national organizations--the Invisible Empire, Knights of the KKK; and the Knights of the Ku Klux Klan, David Duke's creation. Both groups are headquartered in Arkansas. Also prominent is the regional Christian Knights of the KKK, operating from North Carolina. Many former members of the United Klans of America still meet informally, without a central organization.

Allied to the Klan, but even more extreme, is the Christian Identity Movement. Its members profess that both Christ and the Ten Lost Tribes of Israel were not Jews but Aryans, and that Jews are the children of Satan and must be exterminated. Driven by hostility toward Washington, the media, and the banking system, all of which they claim are controlled by a cabal of powerful Jewish interests, they advocate the overthrow of the U.S. government, to which they refer as the Zionist Occupation Government, or ZOG.

The focus for the U.S.-based right-wing extremists is an umbrella organization called the Aryan Nations. Located on a 40 acre compound in Hayden Lake, Idaho, it is led by a fanatical minister and former engineer, who heads the Church of Jesus Christ Christian, which is also headquartered on the compound. Members of the Aryan Nations are a mix of neo-Nazis, white supremacists, anti-semites, survivalists, and militant tax resisters. The group hosts an annual congress, which is a magnet for like-minded individuals and groups, such as the Bruder Schweigen Strike Force II, the Posse Comitatus, the Arizona Patriots, the White Patriot Party, and other militant offshoots of the Ku Klux Klan.

One increasingly prominent group, extreme even in this company, is the Church of the Creator. Founded in 1973 by the late Ben Klassen, a Ukrainian im-

migrant, an engineer, and a former Republican member of the Florida state legislature. The group hates blacks, Jews, the government, and "Judeodemocratic-Marxist values." Its stated goal is "RAHOWA," racial holy war. Members have been convicted of murder, bombing, and attempted arson.

Another specific problem originates with a group calling itself the National Socialist German Workers Party - Overseas Organization (National Sozialistische Deutsche Arbeiter Partei-Auslands Organizatie, or NSDAP-AO). Operating primarily as a shell for its founder, Gary "Gerhard" Lauk, of Lincoln, Nebraska, NSDAP-OA claims to publish neo-Nazi newspapers in ten languages. Lauk's literature, swastika stickers and stickpins, Nazi flags, armbands, and similar paraphernalia are smuggled into Germany in bulk. German police credit them with involvement in 72 criminal incidents in 1991, and three times that many during the wave of xenophobia in 1992. If this is accurate, NSDAP-AO may be one of the only American groups with an important role in international terrorism. Lauk and his organization have not been directly involved in violence, so far as is known, but their role in inciting hate crimes seems to qualify them as a supporter of terrorist activities.

Finally, at least for this discussion, there are the skinheads. Seldom older than 25, often as young as 13, there are about 3,500 skinheads in forty states. They have little in the way of formal structure, clustering in a network of perhaps 160 rapidly changing affinity groups with names like the Aryan Resistance League, the SS of America, the Fourth Reich Skinheads, and the Northern Hammerskins. They share a primal hatred of Jews, blacks, and virtually anyone else who seems in any way different, and abiding love of beer and mayhem. Skinheads are the shock troops of the neo-Nazi and white supremacist movements. Members of this loosely knit movement have committed murders in Alabama, California, Colorado, Florida,

Idaho, Missouri, Nevada, New York, North Carolina, Pennsylvania, Texas, and Washington state. Victims have included blacks, Hispanics, Asians, homosexuals, homeless people, and even other skinheads. Beatings, shootings, stabbings, and synagogue desecrations qualify as routine entertainment for many skinheads.

Despite the decline in KKK membership during the 1980s, there are signs that the white supremacist/skinhead movement is now growing and becoming more sophisticated. As recently as 1988, there were only 1,000 to 1,500 skinheads in twelve states. Even the Klan has stopped losing members and may now be growing slightly. And the Church of the Creator has forged close ties with other white supremacist and neo-Nazi organizations, including the White Aryan Resistance, the National Alliance, and the skinheads. It even operates in other countries, including Canada, England, South Africa, and Sweden. If this growth and increasing coordination proves to be a continuing trend, these groups could quickly rebuild the membership and power lost during the last decade. By the turn of the century, they could become very sophisticated and much more dangerous.

At the opposite end of the political spectrum are Black Muslim extremists, about whom comparatively little is known. Perhaps the largest of these sects is Al-Fuqra, or "the impoverished." The group was formed in Brooklyn, in 1980, after a visit by Sheikh Mubarak Ali Jilani Hashemi of Pakistan, who remains Al-Fuqra's spiritual leader. U.S. membership is estimated at to be about 200 hard-core, mostly African-American Muslims. The organization's headquarters is believed to be in Hancock, New York, but additional compounds are maintained in Deposit, New York; Buena Vista, Colorado; South Carolina; and the California desert.

Al-Fuqra claims to be a civic organization dedicated to the Islamic concept of self-help, and on the surface this appears accurate. Members patrol the streets and corridors of low-income apartment complexes, fight drug dealers, and organize

neighborhood clean-ups. But a storage locker in Colorado Springs, owned by members of the group and raided by local police, contained three large pipe bombs, ten handguns with silencers, and 30 pounds of explosives. Police also discovered target-practice silhouettes labeled "Zionist Pig" and "FBI Anti-Terrorist Team," along with details of the organization's plans. Among other schemes, the group plotted to murder Imam Rashid Khalifa, a Muslim leader in Tucson, to attack Colorado military installations, and to sabotage the power, communications, and air transport infrastructures in Colorado. Khalifa was warned of the murder plot, but nonetheless was stabbed to death within four months.

That is just the beginning. Al-Fuqra has been tied to at least sixteen terrorist actions in the United States and Canada. Among them are the fire bombing of Hindu temples in Denver, Philadelphia, Seattle, and Toronto; the murder of Muslim leaders in Canton, Michigan, and Tucson; and the fire bombing of a Hare Krishna temple in Philadelphia and a Portland, Oregon, hotel owned by the late Bhagwan Shree Rajneesh. The Jewish Defense League and the rival Nation of Islam both are on its list of enemies.

There is at least some evidence that Al-Fuqra is tied to Islamic extremists in the Middle East. Sheikh Jilani promoted the cause of the Afghani mujaheddin throughout the Muslim world during the 1980s. Some American members of Al-Fuqra are believed to have visited the Sudan to train for the fight against Soviet troops in Afghanistan, and a few may actually have joined the mujaheddin. One is Clement Rodney Hampton-El, who has been charged with helping to test the explosives used to bomb the World Trade Center; he has been linked as well to the subsequent plot to bomb other New York-area sites.

If Al-Fuqra is linked to Middle Eastern terror groups, it is not alone. Hamas, Hezbollah, and the Abu Nidal Organization all have established support and opera-

tional infrastructures within the United States. They collect funds, distribute propaganda, recruit, train and await the call to action.

Finally, there are several more domestic causes capable of inspiring acts that arguably qualify as terrorism. In some cases, it may be stretching the point slightly to consider them terrorist movements, for the majority of activists claim to regard violence with horror. Yet each has proved willing to use illegal protest and direct intimidation to promote its goals, and when members have killed or committed acts that might have proved life-threatening, their organizations have shown far more sympathy for the perpetrator than for the victim.

The classic case, and certainly the largest cause of its kind, is the antiabortion movement. Leaders of such antiabortion organizations as Operation Rescue decry violence, yet members routinely harass women entering the clinics and intimidate physicians working at them. Abortion clinics and family-planning centers are bombed and burned, and at least one doctor has been wounded and another shot dead by activists. The movement's radical leaders actively endorse these abusive tactics and meet even murder with "understanding" rather than with forthright condemnation. This is clearly violence directed against noncombatants in order to advance a political cause and aimed at influencing a broader audience. It fits the definition of terrorism.

The so-called "ecoterrorists" represent a less virulent strain of domestic terrorism. Yet they, too, are capable of violence for what fundamentally are political ends. The cutting edge of this movement is Earth First!, founded by David Foreman, author of a book called "Eco-Defense: A Field Guide to Monkeywrenching." ("Monkeywrenching," proposed by nature writer Edward Abbey in a novel called "The Monkey Wrench Gang," is a kind of sabotage aimed at targets deemed ecologically destructive. Typical tactics include pouring sugar in the gas tanks of

earthmoving equipment and driving spikes into tree trunks to prevent them from being harvested.) Earth First! members and others suspected of belonging to the group have done quite a bit of damage since Foreman founded the organization in 1981:

Foreman and colleagues were charged with conspiring to cut power lines to Arizona nuclear plants and a uranium mine, and to chop down ski-lift supports. In a bargain with prosecutors, all pled guilty to lesser charges.

A group calling itself the Earth Night Action Group downed power lines serving Watsonville and Santa Cruz, California, in 1990. Some 95,000 residents were left without power for about twenty-four hours.

And in 1993, about eighty activists occupied the president's office at the University of Arizona to protest the construction of telescopes on the summit of Mount Graham, considered by some to be ecologically sensitive. Twenty-three protesters identified as members of Earth first! were arrested.

As terrorism goes, this is pretty mild. But in the California power outage, at least one woman was left without power for the respirator that keeps her alive. With a little less luck, she might have died.

The animal rights movement, too, has an extremist fringe that has proved capable of acts that approach terrorism. Among the relatively open groups active in the United States are Cleveland Amory's The Fund for Animals, In Defense of Animals, Mobilization for Animals, The National Association of Nurses Against Vivisection, and Trans Species Unlimited. Though occasionally shrill, they operate within the law.

But the movement's underground wing can be anything but benign. The best known organization is the Animal Liberation Front, founded in 1976 as a spin-off from a much older British organization of the same name. Similar groups operate

under such names as Band of Mercy and True Friends. ALF specializes in "liberating" animals from research laboratories and similar facilities, but members have carried out arson, vandalism, bomb threats, and death threats. A 1983 break-in at the UCLA Medical Center "liberated" twelve dogs and cost \$58,000. In 1987, the group burned down a research laboratory at the University of California, Davis, costing \$3.5 million. In Stamford, CT, activist Fran Trutt was charged with attempting to kill president Leon Hirsch, of U.S. Surgical Corporation, which uses animals in medical experiments and surgical training. She had planted a bomb at the company's headquarters.

Clearly none of these organizations yet represents a threat on the scale of Hamas or Hezbollah, in Israel's occupied territories.

Even the white supremacists--though numerous, well organized, and capable of extreme violence--have not yet demonstrated an ability to carry out a systematic campaign of terror on a large scale.

It may not even be possible to create a domestic American terrorist movement large enough to become a serious political threat. As Brian Jenkins, the international terrorism expert, has pointed out, "The United States lacks the two engines that drive terrorism elsewhere. This is not an ideologically oriented society, although specific contentious issues may occasionally motivate ideological violence. Nor does the United States possess geographically discrete, ethnic minorities with separatist tendencies--with the exception of the Puerto Rican separatist movement...."

Yet in the next decade several of those "specific contentious issues" well inspire violence. Clearly, white supremacism, the anti-abortion movement, and Black Muslim extremism are good candidates. But these established threats will be joined by others:

If the United States cannot solve the problems of the inner city, we can expect a long, bitter, low-intensity racial war. We may already have seen the opening salvo in this battle, in the Los Angeles riots. Given a compelling excuse, the inner city poor, primarily Black and Hispanic, spontaneously vented a hostility capable of terrifying the white majority. It would be folly to assume that the violence will always be spontaneous. The well organized Black and Hispanic gangs could become politicized, and provide the structure and discipline for incipient terrorist movements. Particularly disturbing is a trend among members of minorities in our prison population who refer to thefts as "reparations" and "expropriations" -- a mind set reminiscent of the violent 1960s when criminal acts were rationalized as ideological statements. Many black leaders have forecast future racial battles. One Cleveland city councilman even set a deadline: he would work within the system for fifteen years. If by then life had not significantly improved for America's minorities, he would lead an armed rebellion that would bring the country to its knees. That was nearly ten years ago.

That violence, if it comes, will not be limited to the inner city. Extremist leaders no doubt have learned from Los Angeles as well as Watts of the futility of burning their own neighborhoods. In the event of widespread civil strife, we anticipate organized gangs or cadres most probably would take advantage of the chaos to make forays outside the ghettos to liberate property and to ensure that the "Haves" suffer at least as much as the "Have-nots." Race relations are deteriorating and each is ready to believe the worst about the other. Many blacks believe that AIDS was invented and spread by the U.S. government to decimate their population. But paranoia knows no race. Whites also are receptive to rumors. According to one that gained wide currency, the forest fires that raged through much of California during 1993 were set by urban blacks to destroy white communities, as much of Los An-

geles had been destroyed. The rumor was never substantiated, but the fact that it could spread at all says much about the state of race relations in America. So does the incident in early December, in which a mentally deranged black New Yorker shot and killed seven passengers on a Long Island commuter train. His stated purpose was to exact revenge for the conditions under which blacks were forced to live. To some he has achieved "folk-hero" status. More importantly, such an incident could ignite retaliatory violence that could escalate from riot to near insurrection, as we saw in the 1960s when Washington and other cities throughout the nation were aflame. Polarization and paranoia fed by racism, resentment, and a grinding of poverty could well lead to a cycle of violence and domestic terror. How to defuse this situation and reverse the "balkanization" of American society will be one of the great tests of our political leadership--Black, White and Hispanic.

Generational conflict could also be in the offing. For those now twenty something and under, the cause will be clear: their elders have stolen their future. The U.S. national debt is now approaching \$20,000 for every man, woman, and child in the country. Most of it has been run up in order to buy the generation now retired, or approaching retirement, a panoply of entitlement and other services for which they were unwilling to pay themselves. To take just one example, the worst, look at Social Security. Almost every retiree lives in the righteous belief that his payments are his own money--the contributions he and his employers paid into the system during his working years, perhaps with a bit of interest. In fact, most Social Security recipients take in far more than they ever contributed.

That might be tolerable, but for two problems. A lot fewer people were born into the current generation than during the Baby Boom years, so beginning around 2010 each worker will have to help support more than one retiree. And as things stand today, many of them will have trouble just supporting themselves. The

younger generation will never enjoy the government benefits their parents and grandparents do. They will not even be able to pay the debt now being left them. They face a grim life, and they know who to blame for it.

We do not really expect generational conflict to turn violent on a large scale, but protests are likely and years of legislative battles seem inevitable. Undoubtedly, some very ugly incidents will occur; some may qualify as terrorism. On balance, however, none of these domestic issues are likely to inspire terrorism of the magnitude that would seriously threaten American interests either at home or abroad.

In contrast, foreign terrorist groups are a different kettle of fish. The World Trade Center bombing set a precedent that international terrorists can be expected to follow. The presence in the U.S. of Hezbollah, Hamas, and the Abu Nidal Organization represents a greater threat to our security than do any of our home grown groups with the possible exception of some right-wing terrorists from organizations such as The Aryan Nations. In the world of the 21st century, however, even single issue groups and those on the violent fringe, because of access to technologies of mass destruction, could represent a very real threat and will need to be taken very seriously.

Appendix A

The World's Deadliest Terrorist Groups

Abu Nidal organization (ANO) aka: Fatah Revolutionary Council, Arab Revolutionary Council, Arab Revolutionary Brigades, Black September, Revolutionary Organization of Socialist Muslims.

Description

International terrorist organization led by Sabri al-Banna. Split from PLO in 1974. Made up of various functional committees, including political, military, and financial.

Activities

Has carried out over 90 terrorist attacks since 1974 in 20 countries, killing or injuring almost 900 people. Targets the United States, the United Kingdom, France, Israel, moderate Palestinians, the PLO, and various Arab countries, depending on which state is sponsoring it at the time. Major attacks include Rome and Vienna airports in December 1985, the Neve Shalom synagogue in Istanbul, the Pan Am Flight 73 hijacking in Karachi in September 1986, and The City of Poros day-excursion ship attack in July 1988 in Greece. Suspected of carrying out assassination on 14 January 1991 in Tunis of PLO deputy chief Abu Iyad and PLO security chief Abu Hul. ANO members also attacked and seriously wounded a senior ANO dissident in Algeria in March 1990.

Strength

Several hundred plus "militia" in Lebanon and overseas support structure.

Location/Area of Operation

Headquartered in Iraq (1974-83) and Syria (1983-87); currently headquartered in Libya with substantial presence in Lebanon (in the Bekaa Valley and several Palestinian refugee camps in coastal areas of Lebanon). Also has presence in Algeria. Has demonstrated ability to operate over wide area, including Middle East, Asia, and Europe.

External Aid

Has received considerable support, including safehaven, training, logistic assistance, and financial aid from Iraq and Syria (until 1987); continues to receive aid from Libya, in addition to close support for selected operations.

Al-Fatah aka: Al-'Asifa.

Description

Headed by Yasser Arafat, Fatah joined the PLO in 1968 and won the leadership role in 1969. Its commanders were expelled from Jordan following violent confrontations with Jordanian forces during the period 1970-71, beginning with Black September in 1970. The Israeli invasion of Lebanon in 1982 led to the group's dispersal to several Middle Eastern countries, including Tunisia, Yemen, Algeria, Iraq, and others. Maintains several military and intelligence wings that have carried out terrorist attacks, including Force 17 and the Hawari Special Operations Group. Two of its leaders, Abu Jihad and Abu Iyad, were assassinated in recent years.

Activities

In the 1960s and the 1970s, Fatah offered training to a wide range of European, Middle Eastern, Asian, and African terrorist and insurgent groups. Carried out numerous acts of international terrorism in Western Europe and the Middle East in the early-to-middle 1970s.

Strength

6,000 to 8,000.

Location/Area of Operation

Headquartered in Tunisia, with bases in Lebanon and other Middle Eastern countries.

External Aid

Has had close, long-standing political and financial ties to Saudi Arabia, Kuwait, and other moderate Persian Gulf states. These relations were disrupted by the Gulf crisis of 1990-91. Also has had links to Jordan. Received weapons, explosives, and training from the former USSR and the former Communist regimes of East European states. China and North Korea have reportedly provided some weapons.

Armenian Secret Army for the Liberation of Armenia (ASALA) aka: The Orly Group, 3rd October Organization

Description

Marxist-Leninist Armenian terrorist group formed in 1975 with stated intention to compel the Turkish Government to acknowledge publicly its alleged responsibility for the deaths of 1.5 million Armenians in 1915, pay reparations, and cede territory for an Armenian homeland. Led by Hagop Hagopian until he was assassinated in Athens in April 1988.

Activities

Initial bombing and assassination attacks directed against Turkish targets. Later attacked French and Swiss targets to force release of imprisoned comrades. Made several minor bombing attacks against US airline offices in Western Europe in early 1980s. Bombing of Turkish airline counter at Orly Airport in Paris in 1983--eight killed and 55 wounded--led to split in group over rationale for causing indiscriminate casualties. Suffering from internal schisms, group has been relatively inactive

over past four years, although recently claimed an unsuccessful attack on Turkish Ambassador to Hungary.

Strength

A few hundred members and sympathizers.

Location/Area of Operation

Lebanon, Western Europe, Armenia, United States, and Middle East.

External Aid

Has received aid, including training and safehaven, from Syria. May also receive some aid from Libya. Has extensive ties to radical Palestinian groups, including the PFLP and PFLP-GC.

Basque Fatherland and Liberty (ETA)

Description

Founded in 1959 with the aim of creating an independent homeland in Spain's Basque region. Has muted commitment to Marxism. In 1974 split into two factions-ETA-Political-Military and ETA-Military; the former has been inactive since limited home rule granted in 1982. Despite the arrest of several leaders and terrorist cells in Spain and France over the past two years, ETA-Military has continued to conduct lethal attacks.

Activities

Chiefly bombings and assassinations of Spanish Government targets, especially security forces. Finances activities through kidnappings, robberies, and extortion. Bombings are sophisticated, lethal, and sometimes indiscriminate. Over 40 people were killed and over 200 injured in ETA attacks during 1991.

Strength

Unknown; may have hundreds of members, plus supporters.

Location/Area of Operations

Operates primarily in Spain and France but conducted low-intensity bombings against Spanish diplomatic, commercial, and cultural facilities in Italy and Germany in 1991.

External Aid

Has received training at various times in Libya, Lebanon, and Nicaragua. Also has close ties to PIRA.

Chukaku-Ha (Nucleus or Middle-Core Faction)

Description

An ultra-leftist/radical group with origins in the fragmentation of the Japanese Communist Party in 1957. Largest domestic militant group, has political arm plus small, covert action wing called Kansai Revolutionary Army. Funding derived from membership dues, sales of its newspapers, and fundraising campaigns.

Activities

Participates in mass protest demonstrations and snake-dancing in streets; supports farmers' protest of construction of Narita airport, among other causes; sabotaged part of Japanese railroad system in 1985 and 1986; sporadic attacks usually designed to cause only property damage through use of crude rockets and incendiary devices; anti-US attacks include small-scale rocket attempts against US military and diplomatic targets; no US casualties so far.

Strength

3,500.

Location/Area of Operation

Japan.

External Aid

None known.

CNPZ (see Nestor Paz Zamora Commission)

Democratic Front for the Liberation of Palestine (DFLP)

Description

Marxist group that split from the PFLP in 1969. Believes Palestinian national goals can be achieved only through revolution of the masses. In early 1980s, occupied political stance midway between Arafat and the more radical rejectionists. Split into two factions in 1991, one pro-Arafat and another more hardline faction headed by Nayif Hawatmah.

Activities

In the 1970s, carried out numerous small bombings and minor assaults and some more spectacular operations in Israel and the occupied territories, concentrating on Israeli targets such as the 1974 massacre in Ma'alot in which 27 Israelis were killed and over 100 wounded. Involved only in border raids since 1988.

Strength

Estimated at 500 (total for both factions).

Location/Area of Operation

Syria, Lebanon, and the Israeli-occupied territories; attacks have taken place entirely in Israel and the occupied territories.

External Aid

Receives financial and military aid from Syria and Libya.

Devrimci Sol aka: Dev Sol

Description

Formed in 1978 as a splinter faction of the Turkish People's Liberation Party/Front. Espouses a Marxist ideology, intensely xenophobic, and virulently anti-US and anti-NATO; seeks to unify the proletariat to stage a national revolution. Finances its activities chiefly through armed robberies and extortion.

Activities

Conducted attacks against US, Turkish, and NATO targets until weakened by massive arrests during 1981-83. Methods of attack include handgun assassinations and bombings. Since reemergence during late 1980s, has concentrated attacks against current and retired Turkish security and military officials; responsible for the murders of four active and retired generals and nearly 30 police officers in 1991. Resumed operations against foreign interests during 1991, claiming responsibility for assassinating two American contractors and one British businessman; attempted the murder of a US Air Force officer and over 30 bombings against Western diplomatic, commercial, and cultural facilities.

Strength

Several hundred members, several dozen armed militants.

Location/Area of Operation

Carries out attacks in Turkey--primarily in Istanbul, Ankara, Izmir, and Adana. Conducts fundraising operations in Western Europe.

External Aid

Possible training support from radical Palestinians.

ELA (see Revolutionary People's Struggle)

ELN (see National Liberation Army)

ETA (see Basque Fatherland and Liberty)

Farabundo Marti National Liberation Front (FMLN)

Description

Formed in 1980 with Cuban backing, the guerrilla umbrella organization is composed of five leftist groups: Central American Workers' Revolutionary Party (PRTC), People's Revolutionary Army (ERP), Farabundo Marti Popular Liberation Forces (FPL), Armed Forces of National Resistance (FARN), and the Communist

Party of El Salvador's Armed Forces of Liberation (FAL). The group reached a peace agreement with the Government of El Salvador on 31 December 1991.

Activities

Bombings, assassinations, economic sabotage, arson, among other rural and urban operations. Since 1988 the FMLN increased urban terrorism in the capital.

Strength

6,000 to 7,000 combatants.

Location/Area of Operation

El Salvador, limited activity in Honduras.

External Aid

Has received direct support from Cuba and receives support from the Sandinistas in Nicaragua, where it maintains an office. The FMLN also receives significant financial support from front groups and sympathetic organizations in the United States and Europe.

FARC (see Revolutionary Armed Forces of Colombia)

Fatah (see Al-Fatah)

15 May Organization

Description

Formed in 1979 from remnants of Wadi Haddad's Popular Front for the Liberation of Palestine-Special Operations Group (PFLP-SOG). Led by Muhammad al-Umari, who is known throughout Palestinian circles as Abu Ibrahim or the bomb man. Group was never part of PLO. Reportedly disbanded in the mid-1980s when several key members joined Colonel Hawari's Special Operations Group of Fatah.

Activities

Claimed credit for several bombings in the early-to-middle 1980s, including hotel bombing in London (1980), El Al's Rome and Istanbul offices (1981), and

Israeli Embassies in Athens and Vienna (1981). Anti-US attacks include an attempted bombing of a Pan Am airliner in Rio de Janeiro and a bombing on board a Pan Am flight from Tokyo to Honolulu in August 1982. (The accused bomber in this last attack, Mohammed Rashid, is currently jailed in Greece following his conviction for the bombing, which killed a Japanese teenager.)

Strength

50 to 60 in early 1980s.

Location/Area of Operation

Baghdad until 1984. Before disbanding, operated in Middle East, Europe, and East Asia, Abu Ibrahim is reportedly in Iraq.

External Aid

Probably received logistic and financial support from Iraq until 1984.

First of October Antifascist Resistance Group (GRAPO)

Description

Small, Maoist urban terrorist group established in 1975. Loosely associated with the Spanish Communist Party-Reconstituted. Seeks to remove US military forces from Spain and establish a revolutionary regime.

Activities

Carried out small-scale bombing attacks on US and NATO facilities in early 1980s; capabilities reduced by arrests since 1985. During 1991, GRAPO claimed responsibility for bombing a rail line outside Madrid and segments of the NATO pipeline in Spain.

Strength

Probably fewer than a dozen operatives.

Location/Area of Operation

Spain.

External Aid

Reported to have had ties to the French Action Directe and the Italian Red Brigades. The German RAF has sought ties to the group.

Force 17

Description

Formed in early 1970s as a personal security force for Arafat and other PLO leaders.

Activities

According to press sources, in 1985 expanded operations to include terrorist attacks against Israeli targets. No confirmed terrorist activity outside Israel and the occupied territories since September 1985, when it claimed responsibility for killing three Israelis in Cyprus, an incident that was followed by Israeli air raids on PLO bases in Tunisia.

Strength

Unknown.

Location/Area of Operation

Based in Beirut before 1982. Since then, dispersed in several Arab countries. Now operating in Lebanon, other Middle Eastern countries, and Europe.

External Aid

PLO is main source of support.

FPM (see Morazanist Patriotic Front)

FPMR (see Manuel Rodriguez Patriotic Front)

Al-Gama'a al-Islamiyya (aka: The Islamic Group)

Description

An indigenous Egyptian Islamic extremist group active since the late 1970s; appears to be loosely organized with no single readily identifiable operational

leader. Sheikh Omar Abdurrahman is the preeminent spiritual leader. Goal is to overthrow the government of President Hosni Mubarak and replace it with an Islamic state.

Activities

Armed attacks against Egyptian security and other officials, Coptic Christians, Western tourists, and Egyptian opponents of Islamic extremism. It assassinated the speaker of the Egyptian assembly in October 1990 and launched a series of attacks on tourists in Egypt in 1992. One of the attacks resulted in the death of a British tourist.

Strength

Not known, but probably several thousand hardcore members and another several thousand sympathizers.

Location/Area of Operation

Operates mainly in the Al Minya, Asyut, and Qina Governorates of southern Egypt. It also appears to have support in Cairo, Alexandria, and other urban locations, particularly among unemployed graduates and students.

External Aid

Not known. Egyptian Government believes that Iran and Sudan support the group.

GRAPO (see First of October Anti-fascist Resistance Group)

Hawari Group aka: Fatah Special Operations Group, Martyrs of Tal Al Za'atar, Amn Araissi

Description

Part of Yasser Arafat's Fatah apparatus, the group is named after its leader commonly known as Colonel Hawari, who died in an automobile crash in May 1991 while traveling from Baghdad to Jordan. The group has ties historically to Iraq.

Membership includes former members of the radical Palestinian 15 May organization.

Activities

Carried out several attacks in 1985 and 1986, mainly in Europe and usually against Syrian targets. Has also targeted Americans, most notably in the April 1986 bombing of TWA Flight 840 over Greece in which four Americans were killed.

Future of group uncertain following Hawari's death.

Strength

Unknown.

Location/Area of Operation

Middle Eastern countries and Europe.

External Aid

PLO is main source of support.

HAMAS (Islamic Resistance Movement)

Description

HAMAS was formed in late 1987 as an outgrowth of the Palestinian branch of the Muslim Brotherhood and has become Fatah's principal political rival in the occupied territories. Various elements of HAMAS have used both political and violent means, including terrorism, to pursue the goal of establishing an Islamic Palestinian state in place of Israel. HAMAS is loosely structured, with some elements working openly through mosques and social service institutions to recruit members, raise money, organize activities, and distribute propaganda. Other elements, operating clandestinely, have advocated and used violence to advance their goals. HAMAS's strength is concentrated in the Gaza Strip and a few areas of the West Bank. It has also engaged in peaceful political activity, such as running candidates in West Bank chamber of commerce elections.

Activities

HAMAS activists--especially those in the Izz al-Din al-Qassam Forces--have conducted many attacks against Israeli civilian and military targets, suspected Palestinian collaborators, and Fatah rivals. During 1992, elements of HAMAS were responsible for several prominent anti-Israeli attacks, including ambushes of military units in the West Bank and the murder of a member of the Israeli border police in December. HAMAS elements are increasingly using lethal weapons and tactics--such as firearms, roadside explosive charges, and car bombs--in their operations.

Strength

Unknown number of hard-core members; tens of thousands of supporters and sympathizers.

Location/Area of Operations

Primarily the occupied territories, Israel, and Jordan.

External Aid

Receives funding from Palestinian expatriates, Iran, and private benefactors in Saudi Arabia and other moderate Arab states. Some fundraising and propaganda activity takes place in Western Europe and North America.

Hizballah (Party of God) aka: Islamic Jihad, Revolutionary Justice Organization, Organization of the Oppressed on Earth, Islamic Jihad for the Liberation of Palestine

Description

Radical Shia group formed in Lebanon; dedicated to creation of Iranian-style Islamic republic in Lebanon and removal of all non-Islamic influences from area. Strongly anti-West and anti-Israel. Closely allied with, and often directed by, Iran. Dissidents, however, have conducted rogue operations that were not approved by Tehran.

Activities

Known or suspected to have been involved in numerous anti-US terrorist attacks, including the suicide truck-bombing on the US Marine barracks in Beirut in October 1983 and the US Embassy annex in September 1984. Elements of the group were responsible for the kidnapping and detention of most, if not all, US and other Western hostages in Lebanon. Islamic Jihad publicly claimed responsibility for the car-bombing of Israel's Embassy in Buenos Aires in March 1992.

Strength

Several thousand.

Location/Area of Operation

Operates in the Bekaa Valley, the southern suburbs of Beirut, and southern Lebanon: has established cells in Europe, Africa, South America, and elsewhere.

External Aid

Receives substantial amounts of financial, training, weapons, explosives, political, diplomatic, and organizational aid from Iran.

Japanese Red Army (JRA) aka: Anti-Imperialist International Brigade (AIIB)

Description

An international terrorist group formed about 1970 after breaking away from Japanese Communist League Red Army Faction. Now led by Fusako Shigenobu, believed to be in Syrian-garrisoned area of Lebanon's Bekaa Valley. Stated goals are to overthrow Japanese Government and monarchy and to help foment world revolution. Organization unclear but may control or at least have ties to Anti-Imperialist International Brigade (AIIB); may also have links to Antiwar Democratic Front—an overt leftist political organization—inside Japan. Details released following November 1987 arrest of leader Osamu Maruoka indicate that JRA may be organizing cells in Asian cities, such as Manila and Singapore. Has had close and

longstanding relations with Palestinian terrorist groups--based and operating outside Japan--since its inception.

Activities

Before 1977, JRA carried out a series of brutal attacks over a wide geographical area, including the massacre of passengers at Lod airport in Israel (1972) and two Japanese airliner hijackings (1973 and 1977). Anti-US attacks include attempted takeover of US Embassy in Kuala Lumpur (1975). Since mid-1980s has carried out several crude rocket and mortar attacks against a number of US embassies. In April 1988, JRA operative Yu Kikumura was arrested with explosives on the New Jersey Turnpike, apparently planning an attack to coincide with the bombing of a USO Club in Naples, a suspected JRA operation that killed five, including a US service-woman. He was convicted of these charges and is serving a lengthy prison sentence in the United States.

Strength

About 30 hardcore members; undetermined number of sympathizers.

Location/Area of Operation

Based in Syrian-controlled areas of Lebanon; often transits Damascus.

External Aid

Receives aid, including training and base camp facilities, from radical Palestinian terrorists, especially the PFLP. May also receive aid from Libya. Suspected of having sympathizers and support apparatus in Japan.

Kurdistan Workers Party (PKK) aka: Kurdistan Labor Party

Description

Marxist-Leninist terrorist group composed of Turkish Kurds established in mid-1970s. Seeks to set up Marxist state in southeastern Turkey, which has a large population of Kurds.

Activities

Primary targets are Turkish Government forces and civilians in southeastern Turkey but is becoming increasingly active in Western Europe against Turkish targets and rival Kurdish groups. In 1986, attacked NATO target in Mardin, Turkey. In the summer of 1991 the PKK carried out a spate of kidnappings of Westerners; all were released unharmed.

Strength

3,000, plus 2,000 to 5,000 supporters.

Location/Area of Operations

Iran, Syria, and Iraq. Operates in Turkey and Western Europe; training facilities in Lebanon's Bekaa Valley.

External Aid

Probably still receives some aid and safehaven from Syria, Iran, and Iraq.

Lautaro Youth Movement (MJL) aka: The Lautaro faction of the United Popular Action Movement (MAPU/L) or Lautaro Popular Rebel Forces (FRPL)

Description

Violent, anti-US, extremist group that advocates the overthrow of the Chilean Government. Leadership largely from leftist elements but includes criminals and alienated youths. Recruits from poorer areas of cities. The leftist group became active in late 1980s. Its assaults during 1990 increased in number and sophistication and have continued through 1992.

Activities

Has been linked to several assassinations of policemen, bank robberies, and bombings and burnings of Mormon chapels.

Strength

Unknown.

Location/Area of Operation

Chile; mainly in Santiago.

External Aid

May have ties to Cuba.

Manuel Rodriguez Patriotic Front (FPMR)

Description

The FPMR was founded in 1983 as the armed wing of the Chilean Communist Party and named for a hero in Chile's war of independence against Spain. The main movement announced it was laying down arms to become a political movement on 1 June 1991. The group splintered in 1987 into two factions, of which the dissident wing (FPMR/D) is now one of Chile's most active terrorist groups.

Activities

FPMR/D is responsible for numerous bombing attacks against domestic and foreign targets and assassinations of Chileans. Responsible for many attacks on Mormon churches and US businesses from 1986 through 1992. In November 1990 an FPMR/D bomb concealed in a softball bat killed a Canadian and injured a US Embassy officer. The group attacked a Marine guard van at the US Embassy on 16 February 1991 with an antitank rocket that did not detonate and automatic weapons fire, injuring one US marine.

Strength

1,000 to 1,500.

Location/Area of Operation

Chile.

External Aid

Received training and weapons support from Cuba in past years, none in 1991.
May cross-train with Peru's MRTA .

MJL (see Lautaro Youth Movement)

Morazanist Patriotic Front (FPM)

Description

A radical, leftist terrorist group that first appeared in the late 1980s. Attacks made in protest of US intervention in Honduran economic and political affairs.

Activities

Attacks on US, mainly military, personnel in Honduras. Claimed responsibility for attack on a bus in March 1990 that wounded seven US servicemen. Claimed bombing of Peace Corps office in December 1988, bus bombing that wounded three US servicemen in February 1989, attack on US convoy in April 1989, and grenade attack that wounded seven US soldiers in La Ceiba in July 1989.

Strength

Unknown, probably relatively small.

Location/Area of Operation

Honduras.

External Aid

Had ties to former Government of Nicaragua and possibly Cuba.

Mozambican National Resistance (Resistencia Nacional Mocambicana, or RENAMO)

Description

Established in 1976 by the Rhodesian security services, primarily to operate against anti-Rhodesian guerrillas based in Mozambique. South Africa subsequently developed RENAMO into an insurgent group opposing the Front for the Liberation of Mozambique (FRELIMO).

Activities

Operates as a guerrilla insurgency against Mozambican Government and civilian targets; frequently and increasingly runs cross-border operations into Zimbabwe, Malawi, and Zambia, where it has murdered and kidnapped numerous civilians and destroyed property.

Strength

20,000 guerrillas.

Location/Area of Operation

Mozambique; border areas of Zimbabwe, Malawi, and Zambia. External Aid Assistance previously received from South Africa as well as from private individuals and groups in Europe and elsewhere.

MRTA (see Tupac Amaru Revolutionary Movement)

National Liberation Army (ELM)--Bolivia

Description

Claims to be revived ELN that was established by Che Guevara in the 1960s and was active into the early 1970s. Holds traditional Marxist-Leninist revolutionary ideologies. Operates as an umbrella group over numerous small Bolivian subversive movements that include the CNPZ.

Activities

During 1991 focused on domestic Bolivian targets. See Nestor Paz Zamora Commission (CNPZ) for further information on ELN activities. Threats against US interests continued through 1992. Probably responsible for fake bomb placed in US Embassy elevator in April 1991 .

Strength

Unknown.

Location/Area of Operation

Bolivia.

External Aid

May receive training, logistic, and other limited support from Peru's MRTA.

National Liberation Army (ELN)--Colombia**Description**

Rural-based, anti-US, Maoist-Marxist-Leninist guerrilla group formed in 1963. Engaged in unsuccessful peace talks with the Government of Colombia during 1991.

Activities

Periodically kidnaps foreign employees of large corporations and holds them for very large ransom payments. Extortion and bombing attacks against US and other foreign businesses in Colombia, particularly the petroleum industry. Has inflicted major damage on oil pipelines since 1986.

Strength

1,000 to 2,000.

Location/Area of Operation

Colombia.

External Aid

In the past received limited arms and training from Cuba and training from Nicaragua.

Nestor Paz Zamora Commission (CNPZ)**Description**

Radical leftist terrorist organization that first appeared in October 1990. Named after deceased brother of President Paz Zamora. Currently operates under the ELN (Bolivia) umbrella. Violent, extremely anti-US, Marxist-Leninist organization.

Activities

The group attacked the US Embassy Marine guardhouse on 10 October 1990 with automatic weapons and a bomb. One Bolivian policeman was killed and another seriously injured in the attack.

Strength

Unknown. Probably fewer than 100.

Location/Area of Operation

Bolivia.

External Aid

Peru's MRTA has provided training, limited funding, and logistic support.

New People's Army (NPA)

Description

The guerrilla arm of the Communist Party of the Philippines, an avowedly Maoist group formed in December 1969 with the aim of overthrowing the government through protracted guerrilla warfare. Although primarily a rural-based guerrilla group, the NPA has an active urban infrastructure to carry out terrorism; uses city-based assassination squads called sparrow units. Derives most of its funding from contributions of supporters and revolutionary taxes extorted from local business.

Activities

In addition to guerrilla activities, has used urban terrorism, including attacks on government officials, police, and military officers in Manila and other major cities. Has vowed to kill US citizens who allegedly are involved in the government's counterinsurgency campaign. The NPA has killed 10 US military members and private American citizens in the Philippines since 1987. Attacked some US businesses located in rural areas who refused to pay so-called revolutionary taxes.

Strength

16,000, plus support groups.

Location/Area of Operation

Philippines.

External Aid

Receives funding from overseas fundraisers in Western Europe and elsewhere; also linked to Libya. Diverts some funding of humanitarian aid.

Palestine Liberation Front (PLF)

Description

Terrorist group that broke away from the PFLP-GC in mid-1970s. Later split again into pro-PLO, pro-Syrian, and pro-Libyan factions. Pro-PLO faction led by Muhammad Abbas (Abu Abbas), who became member of PLO Executive Committee in 1984 but left the Executive Committee in 1991.

Activities

Abu Abbas-led faction carried out abortive seaborne attack staged from Libya against Israel on 30 May 1990. Abbas's groups were also responsible for October 1985 attack on the cruise ship Achille Lauro and the murder of US citizen Leon Klinghoffer. A warrant for Abu Abbas's arrest is outstanding in Italy. Others who were involved in the hijacking are wanted elsewhere. Openly supported Iraq during Gulf war.

Strength

At least 50.

Location/Area of Operation

PLO faction based in Tunisia until Achille Lauro attack. Now based in Iraq.

External Aid

Receives logistic and military support mainly from PLO, but also Libya and Iraq.

Palestine Liberation Organization (PLO)

Description

Founded in 1964 as a Palestinian nationalist umbrella organization dedicated to the establishment of an independent Palestinian state. After the 1967 Arab-Israeli war, control devolved to the leadership of the various fedayeen militia groups, the most dominant of which was Yasser Arafat's Al-Fatah. In 1969, Arafat became chairman of the PLO's Executive Committee, a position he still holds. In the early 1980s, PLO became fragmented into several contending groups but remains the preeminent Palestinian organization. The United States considers the PLO an umbrella organization that includes several constituent groups and individuals holding differing views on terrorism. At the same time, US policy accepts that elements of the PLO have advocated, carried out, or accepted responsibility for acts of terrorism. PLO Chairman Arafat publicly renounced terrorism in December 1988 on behalf of the PLO. The United States considers that all PLO groups, including Al-Fatah, Force 17, Hawari Group, PLF, and PFLP, are bound by Arafat's renunciation of terrorism. The US-PLO dialogue was suspended after the PLO failed to condemn the 30 May 1990 PLF attack on Israeli beaches. PLF head Abu Abbas left the PLO Executive Committee in September 1991; his seat was filled by another PLF member.

Activities

In the early 1970s, several groups affiliated with the PLO carried out numerous international terrorist attacks. By the mid-1970s, under international pressure, the PLO claimed it would restrict attacks to Israel and the occupied territories. Several terrorist attacks were later carried out by groups affiliated with the PLO/ Fatah, including the Hawari Group, the Palestine Liberation Front, and Force 17, against targets inside and outside Israel.

Strength

See numbers for affiliated groups.

Location/Area of Operation

Tunis, other bases in various countries in the Middle East .

External Aid

See affiliated groups. Accurate public information on financial support for the PLO by Arab governments is difficult to obtain.

Palestinian Islamic Jihad (PIJ)**Description**

The PIJ originated among militant Palestinian fundamentalists in the Gaza Strip during the 1970s. The PIJ may be a series of loosely affiliated factions, rather than a cohesive group. The PIJ is committed to the creation of an Islamic Palestinian state and the destruction of Israel through holy war. Because of its strong support for Israel, the United States has been identified as an enemy of the PIJ. The PIJ also opposes moderate Arab governments that it believes have been tainted by Western secularism.

Activities

The PIJ demonstrated its terrorist credentials when it attacked a tour bus in Egypt in February 1990 and killed 11 people, including nine Israelis. The PIJ also has carried out cross-border raids against Israeli targets in the West Bank and Gaza Strip. A PIJ leader in Jordan has publicly threatened to attack US interests. PIJ agents were arrested in Egypt in September 1991 while attempting to enter the country to conduct terrorism.

Strength

Unknown.

Location/Area of Operations

Primarily Israel and occupied territories and other parts of the Middle East, including Jordan and Lebanon.

External Aid

Uncertain, possibly Iran and Syria.

PKK (see Kurdistan Workers Party)

Popular Front for the Liberation of Palestine (PFLP)

Description

Marxist-Leninist group that is a member of the PLO founded in 1967 by George Habash. After Fatah, is the most important military and political organization in the Palestinian movement. Advocates a Pan-Arab revolution. Although remaining in the PLO, Habash has publicly differed with Arafat. Has spawned several dangerous splinter groups.

Activities

Committed numerous international terrorist attacks between 1970 and 1977. Since the death in 1978 of Wadi Haddad, its terrorist planner, PFLP has carried out numerous attacks against Israeli or moderate Arab targets .

Strength

800.

Location/Area of Operation

Syria, Lebanon, Israel, and the occupied territories.

External Aid

Receives most of its financial and military assistance from Syria and Libya.

Popular Front for the Liberation of Palestine-General Command (PFLP-GC)

Description

Split from the PFLP in 1968, claiming that it wanted to focus more on fighting and less on politics. Violently opposed to Arafat's PLO. Led by Ahmad Jabril, a former captain in the Syrian Army. Closely allied with, supported by, and probably directed by Syria.

Activities

Claims to have specialized in suicide operations. Has carried out numerous cross-border terrorist attacks into Israel, using unusual means, such as hot-air balloons and motorized hang gliders. Hafiz Kassem Dalka-moni, a ranking PFLP-GC official, was convicted in Germany in June 1991 for bombing US troop trains. He faces additional charges in Germany for other terrorist offenses, including manslaughter.

Strength

Several hundred.

Location/Area of Operation

Headquarters in Damascus with bases in Lebanon and cells in Europe.

External Aid

Receives logistic and military support from Syria, its chief sponsor. Financial support from Libya. Safehaven in Syria. Support also from Iran.

Popular Front for the Liberation of Palestine-Special Command (PFLP-SC)

Description

Marxist-Leninist group formed by Abu Salim in 1979 after breaking away from the now-defunct PFLP-Special Operations Group.

Activities

Has claimed responsibility for several notorious international terrorist attacks in Western Europe, including the bombing of a restaurant frequented by US serv-

icemen in Torrejon, Spain, in April 1985. Eighteen Spanish civilians were killed in the attack.

Strength

50.

Location/Area of Operation

Operates out of southern Lebanon, in various areas of the Middle East, and in Western Europe.

External Aid

Probably receives financial and military support from Syria, Libya, and Iraq.

Popular Struggle Front (PSF)

Description

Radical Palestinian terrorist group once closely involved in the Syrian-dominated Palestinian National Salvation Front. Led by Dr. Samir Ghosheh. Rejoined the PLO in September 1991.

Activities

Terrorist attacks against Israeli, moderate Arab, and PLO targets.

Strength

Fewer than 300.

Location/Area of Operation

Mainly Syria and Lebanon, and elsewhere in the Middle East.

External Aid

Receives support from Syria and may now receive aid from the PLO.

Provisional Irish Republican Army (PIRA) aka: The Provos

Description

A radical terrorist group formed in 1969 as the clandestine armed wing of Sinn Fein, a legal political movement dedicated to removing British forces from Northern Ireland and then to unify Ireland. Has a Marxist orientation. Organized into small, tightly knit cells under the leadership of the Army Council.

Activities

Bombings, assassinations, kidnappings, extortion, and robberies. Targets government and private-sector interests--including senior British officials and British military targets in Western Europe--and Northern Irish Protestant paramilitary organizations. Has become increasingly indiscriminate in its spectacular bombing attacks. PIRA has stepped up operations on mainland Britain over the past three years, conducting numerous attacks there during 1992. In April, it exploded a huge van bomb in London, killing three people and wounding 90 others, including one American. In the autumn, the PIRA launched a major bombing campaign in London against train stations, hotels, and shopping areas, resulting in casualties and major property damage.

Strength

Several hundred, plus several thousand sympathizers.

Location/Area of Operation

Northern Ireland, Irish Republic, Great Britain, and Western Europe.

External Aid

Has received aid from a variety of groups and countries and considerable training and arms from Libya and, at one time, the PLO. Also is suspected of receiving funds and arms from sympathizers in the United States. Maintains links to ETA.

Red Army Faction (RAF)

Description

The small and disciplined RAF is the successor to the Baader-Meinhof Gang, which originated in the student protest movement in the 1960s. Ideology is an obscure mix of Marxism and Maoism; committed to armed struggle. Organized into hardcore cadres that carry out terrorist attacks and a network of supporters who provide logistic and propaganda support. Has survived despite numerous arrests of top leaders over the years.

Activities

Bombings, assassinations, kidnappings, and robberies. Targets German Government and private sector and US interests. Among the latter, attempted assassination in Belgium of NATO Commander (1979); bombing of NATO Air Force headquarters in Ramstein (1981); rocket attack of USAREUR Commander in Heidelberg (1981); and bombing of Rhein-Main Air Force Base (1985). In February 1991, the RAF fired approximately 250 assault rifle rounds at the US Embassy in Bonn, and in April the group assassinated the German Trust Agency director, Detlev Karsten Rohwedder.

Strength

Ten to 20, plus several hundred supporters.

Location/Area of Operations

Germany.

External Aid

Basically self-sustaining, but during Baader-Meinhof period received some support from Middle Eastern terrorist groups; some ties may still exist. The RAF received logistic support, sanctuary, and training from the German Democratic Republic during the early 1980s. The RAF appears to be developing closer ties to GRAPO in Spain.

RENAMO (*see Mozambican National Resistance*)

Revolutionary Armed Forces of Colombia (FARC)

Description

Established in 1966 as military wing of Colombian Communist Party; is largest guerrilla group there. Goal is to overthrow government and ruling class; anti-United States. Organized along military lines, includes at least one urban front.

Activities

Armed attacks against Colombian targets, bombings of US businesses, kidnappings of Colombians and foreigners for ransom, and assassinations. Traffics in drugs and has well-documented ties to drug traffickers. Peace talks with Colombian Government have proved unsuccessful.

Strength

Approximately 4,500 to 5,500 armed combatants and 10,000 supporters.

Location/Area of Operation

Columbia.

External Aid

FARC has ties to Cuba; amount of aid unknown.

Revolutionary Organization 17 November (17 November)

Description

A radical leftist group established in 1975 and named for the November 1973 student uprising protesting the military regime. Anti-US, anti-Turkish, anti-NATO; committed to violent overthrow of the regime, ouster of US bases, removal of Turkish military presence from Cyprus, and severing of Greece's ties to NATO and the EC. Organization is obscure, possibly affiliated with other Greek terrorist groups.

Activities

Initial attacks were selected handgun assassinations against senior US officials, including US Embassy official Richard Welch in 1975 and US Navy Capt. George

Tsantes in 1983. Began assassinating Greek officials and public figures in 1976 and added bombings, including attacks against US military buses in 1987 and assassination of US defense attaché William Nordeen in 1988. Since 1990 has expanded targeting to include EC facilities and foreign firms investing in Greece and added improvised rocket attacks to its methods. In 1991 was responsible for at least five of the 15 terrorist attacks against coalition targets in Greece during the Gulf War, including the assassination in March of a US Army sergeant. Also stepped up attacks against Turkish interests with attempted murder of a Turkish Embassy official in July 1991, and assassination of Turkish Embassy press attaché in October 1991.

Strength

Unknown, but presumed to be small.

Location/Area of Operations

Greece, primarily in Athens metropolitan area.

External Aid

May receive support from ELA and other Greek terrorist group cadres.

Revolutionary People's Struggle (ELA)

Description

Formed in 1971 to oppose the Greek military junta; is a self-described leftwing revolutionary, anticapitalist, anti-imperialist group. Organization is unclear, but probably consists of a loose coalition of several very small and violent groups or affiliates, possibly including 17 November.

Activities

Before 1974, was nonviolent; turned to terrorism after removal of junta. Has targeted US military and business facilities and, since 1986, stepped up attacks on Greek Government and commercial interests; primary method has been bombings of buildings, apparently without intent to endanger life. Safehouse raid in November

1990 revealed weapons cache and direct contacts with 1 May and Revolutionary Solidarity; during 1991, ELA and 1 May claimed joint responsibility for over 20 bombings.

Strength

Unknown, perhaps up to 20 or 30, plus supporters.

Location/Area of Operation

Greece.

External Aid

No known foreign sponsors.

Sendero Luminoso (Shining Path, SL)

Description

Peru's largest subversive organization is among the world's most dangerous and ruthless terrorist groups. Formed in late 1960s by then university professor Abimael Guzman Reynoso. Goal is to destroy existing Peruvian institutions and replace them with a peasant revolutionary regime as well as to rid Peru of foreign influences. Has extensive ties to narcoproducers and narcotraffickers working in Peru.

Activities

Killed two foreigners in 1992. Engages in particularly brutal forms of terrorism. Originally rural based, but has increasingly operated in urban areas since 1986. Has attacked diplomatic missions of nearly every country represented in Peru, foreign businesses, foreign and domestic humanitarian aid projects, in addition to Peruvian Government and private-sector targets. September arrest of Guzman and three other politburo members in Lima was severe blow.

Strength

4,000 to 5,000 combatants. Strong rural support base.

Location/Area of Operation

Peru.

External Aid

No known foreign sponsors, although SL sympathizers in Latin America, North America, and Europe obtain political and possibly some financial support from local radicals. Receives money from drug trade, including Colombian narcotics traffickers.

17 November (see Revolutionary Organization 17 November)

Sikh Terrorism

Description

Sikh terrorism is sponsored by a number of Indian and expatriate Sikh groups who want to carve out an independent Sikh state called Khalistan (''Land of the Pure'') from Indian territory. Sikh violence outside India, which surged following the Indian Army's 1984 assault on the Golden Temple, Sikhism's holiest shrine, has decreased but remains high. Groups that have carried out acts of terrorism include the Dash-mesh or 10th Regiment (active in India, Germany, and Canada); Dal Khalsa; Babbar Khalsa (India, Western Europe, Canada); and the All-India Sikh Students Federation (militant wing of the main Sikh party, the Akali Dal, now splintered).

Activities

Regular and bloody attacks mounted frequently in India against Hindus and against Indian officials and facilities, particularly in Punjab; they include assassinations, bombings, and kidnappings. Sikh extremists probably bombed the Air India jet downed over the Irish Sea in June 1985, killing 329 passengers and crew. On the same day, a bomb planted by Sikhs on an Air India flight from Vancouver exploded in Tokyo's Narita airport, killing two Japanese baggage handlers. In 1991, Sikh

terrorists attempted to assassinate the Indian Ambassador in Romania--once India's senior police officer in Punjab (1986-89)--and kidnapped and held the Romanian Charge in New Delhi for seven weeks. Sikh attacks within India, ranging from kidnappings and bombings to assassinations, continue at a high level. Indian security forces captured or killed many Sikh leaders in 1992, however, and total civilian deaths in Punjab have dropped as compared to 1991, when more than 3,300 civilians died. There was a marked drop in the number of killings during the closing months of 1992.

Strength

Unknown.

Location/Area of Operation

India, Western Europe, and North America.

External Aid

Sikh expatriates have formed a variety of international organizations that lobby for the Sikh cause overseas. Most prominent are the World Sikh Organization and the International Sikh Youth Federation.

The Tamil Tigers aka: Liberation Tigers of Tamil Eelam (LTTE)

Description

Founded in 1972, by young Sri Lankan Tamils, its primary objective is the creation of a separate Tamil state. It is the only Tamil group that fought the Indian Peacekeeping Force in Sri Lanka, and has long been the strongest and most ruthless of the Tamil separatist groups.

Activities

The Tigers engage in systematic campaigns of bombing, assassination and other forms of terror -- including suicide attacks. They target military, political and security officials and carry out operations designed to inflict mass casualties on the

civilian population. The Tigers killed 106 people in their April 1987 bomb attack against Colombo's central bus station; and later that year, after 12 captured terrorists committed suicide by swallowing cyanide capsules, the tigers killed well over 200 people in a orgy of reprisals.

Strength

Roughly estimated to number 2,000 active members.

Location/Areas of Operation

Jaffna Peninsula, Sri Lanka.

External Aid

Receives support from the Tamil Nadu State in India and Tamil expatriates abroad.

Terra Lliure (TL) (Free Land)

Description

Leftwing Catalanian separatist terrorist group formed in the 1970s with the goal of establishing an independent Marxist state in the Spanish Provinces of Catalonia and Valencia. Leadership announced in July 1991 that the group had ceased terrorist operations, but hardcore members may remain active.

Activities

Mainly small-scale bombing attacks against property in northeastern Spain. Targets include foreign banks and travel agencies. Reportedly renounced terrorism in July 1991.

Strength

Unknown.

Location/Area of Operation

Spain.

External Aid

None known.

Tupac Amaru Revolutionary Movement (MRTA)

Description

Traditional Marxist-Leninist revolutionary movement in Peru formed in 1983. Led by Nestor Cerpa and Victor Polay. Objective is to rid Peru--and perhaps region--of "imperialist" influence and establish a Marxist regime.

Activities

Responsible for more anti-US attacks than any other group in Latin America. In 1990 and 1991, attacked the US Ambassador's residence, bombed the US Consulate and US-Peruvian Binational Center, and attacked US businesses and Mormon churches. Attacked Peru's Presidential Palace and President Fujimori's airplane in 1991. Attacks down in 1992 because of internal dissension, increased government pressure, and June arrest of MRTA leader Victor Polay.

Strength

1,000 to 2,000 combatants.

Location/Area of Operation

Peru. Bolivia in conjunction with the ELN.

External Aid

Has received training in Cuba. May have ties to Libya.

Appendix B

Key Annotated References

Alexander, Yonah and Abraham H. Foxman (eds.). The 1988-1989 Annual on Terrorism. Boston: Martinus Nijhoff, 1990. [Call Number: HV 6431.A56 1988/89]

The chapters in this volume, written in 1988 and 1989, present a regional and global overview of international terrorism. They cover a variety of subjects: the invasion of the Maldives and its links with international terrorism; the platform of the Islamic Resistance Movement (Hamas); the threat of "chemoterrorism"; the interface between energy and terrorism; the U.S. antiterrorism experience as seen from a French perspective; U.S. policy options; and terrorism and media values.

Keyword(s): terrorism; United States; Islamic groups; chemical weapons; U.S. Government policy; media

Arnold, Terrell E. The Violence Formula. Lexington, Massachusetts: Lexington Books, 1988. [Call Number: HV 6431.A763 1988]

This book attempts to map the dynamics and some of the consequences of the socializing of violent methodologies. It argues that the distinctions between strategies of peaceful protest, civil disobedience, terrorism, and insurgency are dissipating among political movements worldwide. The result is an increasing incidence of violence in politics by both state and nonstate groups. As critical distinctions between violent and nonviolent action recede, insurgency and terrorism are becoming increasingly common and accepted forms of political expression. The media, particularly electronic, have helped to encourage this condition by failing to distinguish sufficiently between violent and nonviolent movements and protests. The result has

been to equalize all political activity in the minds of the public, regardless of methods employed by groups. The author recommends that definitions of terrorism be clearly established and applied consistently, and that a uniform code of acceptable political expression be enforced both domestically and internationally.

Keyword(s): terrorism; definition; low-intensity conflict; media

Beres, Louis R. Terrorism and Global Security: The Nuclear Threat. Boulder, Colorado: Westview, 1987. [Call Number: HV 6431.B47 1987]

This book presents a strategy for countering nuclear terrorism that embraces both technological and behavioral measures. It includes policies for deterrence and situation management on the national and international scale and points toward a major reshaping of world order. The author explores the political bases of terrorism by considering the factors that might foster nuclear terrorism, the forms it could take, and the probable consequences of such acts. An analysis is made of the essential distinctions between lawful insurgencies and terrorism, and the impact of U.S. foreign policy. Part One of the book is analytical. It examines the various potential methods of nuclear terrorism, including detonation of nuclear explosives, radiological weapons, and nuclear reactor sabotage. It also discusses the possibility that a nuclear terrorist incident might unleash a worldwide nuclear war, and the likely effects of such a war. Part I also analyzes the political, psychological, and material factors that might produce nuclear terrorism. Material factors (terrorist access to nuclear weapons, self-development, and opportunities for sabotage of nuclear reactors) may combine with psychological factors (terrorist inclinations to nuclear violence, and insensitivity to orthodox deterrence) and political factors (interterrorist cooperation and state tolerance and support of terrorism) to produce opportunities for nuclear terrorism. Part Two is prescriptive. It presents practical antiterrorist measures, such as hardening targets, improving physical security, and nonprolifera-

tion. It also provides behavioral strategies aimed at potential nuclear terrorists. The final section of the book recommends that the United States redefine its fundamental national interests to lessen the danger of nuclear terrorism and worldwide nuclear war.

Keyword(s): terrorism; nuclear weapons; future trends; low-intensity conflict; counterterrorism; U.S. Government policy

Bermudez, Joseph S. Terrorism: The North Korean Connection. New York: Crane Russak, 1990. [Call Number: HV 6433.K7 B47 1990]

This book provides an historical overview of the involvement by the Democratic People's Republic of Korea (DPRK) in support of international terrorism and subversive activities. The book is divided into geographic chapters, with country subsections documenting DPRK support and active participation in terrorism and insurgency. The primary factors for the DPRK's worldwide support for terrorism and revolution are threefold. First, has been the DPRK's relentless striving for legitimacy and acceptance vis-a-vis the Republic of Korea (ROK). Second, has been the DPRK's adoption of an agenda opposing "imperialist" countries, especially the United States, the ROK, and its allies, whenever and wherever possible. Finally, the revolutionary guerilla background of the DPRK leadership, particularly, Kim Il Sung, creates a personal affinity and empathy toward revolutionaries throughout the world. The author concludes that the DPRK's involvement with international terrorism will continue as long as Kim Il Sung or his son Kim Jong Il remain in power. This involvement may well dramatically escalate when Kim Jong Il assumes the leadership of the DPRK from his father.

Keyword(s): terrorism; state sponsorship; North Korea; State-sponsored terrorism; revolution; future trends

Bremer, Paul. "Continuing the Fight Against Terrorism,." Terrorism, [Washington], 12, No. 1, January-February 1989, 81-87. [Call Number: HV6431.T46]

This article reviews the counterterrorism strategy implemented by the Reagan administration. The three pillars of the policy are viewed as having had a positive effect on deterring terrorist attacks against Americans abroad. Several foreign governments followed Reagan's lead and drafted similar strategies. The three basic principles of the Reagan administration were: the United States would not negotiate with terrorists; the United States would condemn, and possibly retaliate militarily against states sponsoring terrorism against Americans; and law enforcement officials were given more of the legal and financial resources they needed to apprehend terrorists in the United States and mandate the extradition of terrorists who attacked American interests abroad. Bremer considers narcoterrorism in Latin America to be the most serious foreign terrorist threat to U.S. interests at this time. He predicts that the use of more sophisticated bombs and weapons is a trend that must be addressed by U.S. agencies responsible for counterterrorism. A national counterterrorism research and development program sponsored by the U.S. Department of State has, to date, been poorly funded by Congress. Bremer emphasizes the need for better coordination of counterterrorism policies among U.S. Government agencies in order to keep on top of the fast-paced changes that are a fact of life in the case of terrorism.

Keyword(s): counterterrorism; terrorism; U.S. Government policy

Bukharin, Oleg. "The Threat of Nuclear Terrorism and the Physical Security of Nuclear Installations and Materials in the Former Soviet Union,." Occasional Papers of the Center for Russian and Eurasian Studies, [Monterey, CA], No. 2, August 1992, 1-20. [Call Number: TK1362.F6B85]

This study describes the regulations administered from Moscow in the former Soviet Union and discusses the increased likelihood that the failure of newly independent republics of the former Soviet Union to safeguard nuclear facilities on their territory could allow an indigenous or foreign terrorist group to steal nuclear material for its use, or to threaten the security of population centers with an attack on a nuclear facility. The author believes that the current governments of the Central Asian republics of Armenia, Azerbaijan, Turkmenistan, Uzbekistan, Krgyzstan, and Tajikistan have, to date, failed to provide adequate security measures for their nuclear facilities. Terrorism is increasing in these republics and small military strikes on government and industrial targets could escalate if any of these groups use terrorist tactics to undermine public confidence in government leaders. The possibility that a foreign terrorist group, particularly one of the Iranianbacked Hezbollah groups, could evade security forces of the Central Asian republics and steal weaponsusable materials for use by them or their sponsors will remain a danger until regimes become stable and border conflicts are settled throughout the region. The author advises the U.S. Government to offer assistance to the newly independent republics of the former Soviet Union for improving the security of their nuclear facilities.

Keyword(s): terrorism; Soviet Union; nuclear weapons; future trends

Calvert, Peter. Revolution and Counter-Revolution. Minneapolis, University of Minnesota Press, 1990. [Call Number: JC 491.C233 1990]

This book reexamines the place of revolution in modern social theory and reasserts the need for systematic study in the social sciences. It argues that revolution must by its nature be disputed. It is hated and feared by incumbent governments but admired and emulated by those seeking to change the world and make it a better place. When people observe revolutions, their interpretations are conditioned by

changing intellectual fashion and wishful thinking, and so too are the theories derived from them.

Keyword(s): revolution; theoretical aspects

Cetron, Marvin J. "The Growing Threat of Terrorism." The Futurist, 23, No. 4, July-August 1989, 2024.

The author forecasts that terrorism will continue to be a low-intensity conflict (LIC) form of warfare in the 21st century. New weapons are becoming available to terrorists, such as Stinger, hand-held rockets, computer viruses, electromagnetic pulse generators, chemical and biological weapons, and nuclear weapons. In the 1990s the biggest transformation in LIC will be a vast increase in the incidence of domestic terrorism in the United States by extremist groups such as antiabortionists, drug dealers, and ultra right-wing elements. New targets will include computer networks, nuclear plants, natural gas pipelines, bridges, and communications networks. The author concludes that the most effective means to combat terrorism is improved preparation by governmental and private sectors.

Keyword(s): terrorism; future trends; technology

Charters, David A (ed.). Democratic Responses to International Terrorism. Ardsley-on-Hudson, NY: Transnational Publishers, 1991. [Call Number: HV 6431 .D46 1990]

The book examines key aspects of countering international terrorism and attempts to identify viable policy options for democratic governments. The first part of the book provides a comprehensive analysis of international terrorism. Thomas Mitchell's chapter, "Defining the Problem," examines the problem of defining terrorism, particularly the obstacles hindering the development of a commonly agreed upon definition. He concludes by offering a definition of international terrorism as "those terrorist actions carried out by either autonomous or state-supported actors

affecting nationals of at least two states." In the second chapter, "The Nature of Contemporary International Terrorism," Jeffrey Ian Ross examines the nature of contemporary international terrorism by discussing research sources on the subject, including monographs, textbooks, government publications, consultant reports, academic and quasi-academic journals, and book chapters. He points out that there have been no attempts in the literature to develop a typology of international terrorism. His chapter then discusses recent trends in the literature to analyze terrorism in terms of its quantitative, geographic, targeting, and tactical aspects. Ross also discusses terrorist groups, support networks, and future trends, which he lists as "increased links among terrorist groups; more extravagant attention-seeking destructive acts; new weapons finding their way into the terrorist arsenal; increase in the use of terrorism by governments as surrogate warfare; and, the possibility that terrorists will use more destructive technologies like nuclear, biological, chemical and toxic weapons." He argues that pronouncements about future trends usually exclude explanations of the methods that futurists employ to arrive at predictions such as "trend extrapolation; scenarios; mapping; use of expert opinion; and models, games and simulations." Other chapters discuss terrorism and civil aviation, aircraft hijacking, contingency planning and incident management, Canadian counterterrorism policy, the role of the police in countering terrorism, counterterrorism intelligence, the role of the media, and military and paramilitary measures.

Keyword(s): terrorism; counterterrorism; theoretical aspects; international relations; law enforcement; future trends

Clutterbuck, Richard. Terrorism and Guerilla Warfare: Forecasts and Remedies. London: Routledge, 1990. [Call Number: HV 6431 C554 1990]

This book analyzes current trends in terrorism and guerrilla warfare and attempts to predict future trends for the next five to ten years. Part I examines the

spectrum of subnuclear conflict, from "agit-prop" and street disorder, through guerilla warfare and terrorism, to civil war and invasion. Part II examines current and potential technological developments, as they affect weapons, choice of terrorist targets, and the means of countering terrorism by better intelligence and security. Part III examines the effects of drug trafficking on both rural and urban terrorism, among producers and processors in the Third World, international traffickers, and consumers in affluent Western societies. This part concludes that the cure lies in determined action by Western governments in their own countries to cut off demand. Part IV examines the organization, tactics, and trends in rural guerrilla warfare, both in conducting and countering it, and assesses the likely effects of both political and technological change. Part V examines urban terrorism. Part VI considers worst case scenarios of terrorism proliferation. The author concludes that new types of terrorism should be combatted through the use of innovative technological, legal, and law enforcement mechanisms. These would include antiterrorism technologies such as magnetic identification card systems, advanced explosives detection devices, and the use of artificial intelligence to thwart electronic terrorism. More effective antiterrorist legislation and law enforcement mechanisms should also be used in cases where the terrorist threat increases dramatically. Special antiterrorist laws on detention, special antiterrorist courts, and automatic life sentences for convicted terrorists and drug traffickers should be considered. In deciding whether to implement more vigorous antiterrorism measures, an effort should be made to strike a balance between maintaining civil liberties and guaranteeing public safety. Nevertheless, concerns over civil liberties should not prevent the implementation of certain types of restrictions and information gathering systems that would significantly enhance public safety.

Keyword(s): terrorism; low-intensity conflict; guerrilla warfare; narcoterrorism; technology; counterterrorism; international relations; future trends

Congressional Research Service, Library of Congress. International Terrorism: A Compilation of Major Laws, Treaties, Agreements, and Executive Documents: Report Prepared for the Committee on Foreign Affairs, U.S. House of Representatives. Washington: Government Printing Office, July 1991. [Call Number: JX 5420 .U58 1991]

The publication is a compendium of major U.S. legislative and executive branch efforts to combat international terrorism. Sections cover foreign assistance and related legislation, Department of State legislation, trade and financial legislation, treaty implementing legislation, executive branch documents, economic summit conferences, bilateral agreements, multilateral treaties, reports to Congress and the President, regulations, and an international civil aviation organization document.

Keyword(s): terrorism; legal aspects; United States

Corr, Edwin G., and David C. Miller, Jr. "United States Government Organization and Capability to Deal with Low-Intensity Conflict." Pages 17-45 in Low-Intensity Conflict: Old Threats In A New World. Edwin G. Corr and Stephen Sloan (eds.). Boulder, Colorado: Westview Press, 1992. [Call Number: DB49 .L69 1992]

The authors believe that the post-Cold War international environment is characterized by heightened instability in many regions, particularly the Third World, which poses serious threats to U.S. interests. These security threats must be met by improving U.S. governmental organizations and capabilities in the area of low-intensity conflict (LIC). The chapter discusses U.S. Government experience with LIC, particularly the early efforts in the 1949-80 period, when the political, social, and economic goals of counterinsurgency were consistently overshadowed during the

Kennedy and Johnson administrations by the immediate military and geopolitical objectives of winning the Vietnam War, and scant attention was given to LIC under the Nixon, Ford, and Carter administrations. LIC was elevated in importance during the Reagan administration, particularly as it related to insurgencies in Angola, Afghanistan, Nicaragua, and El Salvador. Also under the Reagan administration the new bureaucratic structure for dealing with LIC was created, which remained, with slight alteration, throughout the Bush presidency. The authors argue that in spite of the evolution in the U.S. approach to LIC, there remains a reluctance to deal with the challenge of LIC. This results from the defense priority during the last forty years on preventing nuclear war, with a primary focus on Europe, while all armed conflicts occurred in the Third World. Following a discussion of efforts in the form of studies and commissions to improve U.S. understanding and capabilities in the area of LIC, such as the 1958 Rockefeller Report, the 1986 Packard Commission, and the 1988 Long-Term Integrated Strategy, the authors recommend a number of improvements in the way specific government agencies respond to LIC. For example, they argue that good leadership is essential for coordination by the National Security Council of the many components of LIC into a single directorate; that the Department of State is poorly organized, understaffed, and lacking in resources to effectively serve as the lead agency for LIC; that the Department of Defense is still insufficiently committed and enthusiastic about LIC—compared to mid- and high-intensity modes of warfare; that while the Central Intelligence Agency has elevated two major "operating" LIC accounts—counterterrorism and counternarcotics—problems remain in sharing and integrating intelligence from other intelligence and police agencies. In addition, the authors criticize the Agency for International Development for being counterproductive to effective LIC management over the last two decades; the Department of Justice provides "poor to nonexistent" support

to judicial systems of countries under LIC-type attack; the Department of Commerce should provide greater encouragement and support to U.S. industry to increase its presence in countries under siege; and, finally, the Office of Management and Budget/Department of the Treasury, while providing fiscal oversight for U.S. Government activities, should come up with innovative responses to economies in countries under siege. The chapter concludes with a recommendation for five actions whose implementation by the executive branch, the authors believe, will improve U.S. Government management of LIC. First, an organizational change in the Department of State should incorporate into one bureau the Coordinator for Counterterrorism, the Bureau of International Narcotics Matters, the PoliticoMilitary Bureau, and other functional offices. Second, while there is a desire not to militarize LIC, only the Department of Defense has the required management capability to effectively manage a LIC program. Third, LIC engagements should be overseen by a small institution within the White House executive office, independent of the National Security Council. Fourth, the International Cooperation Act of 1991 should be passed by Congress. Fifth, the Department of State's Foreign Affairs Training Center should implement a training program for representatives of government agencies and uniformed services being assigned to countries facing a LIC.

Keyword(s): low-intensity conflict; U.S. Government policy; future trends

Gal-Or, Noemi (ed.). Tolerating Terrorism in the West: An International Survey. New York: Routledge, 1991. [Call Number: HV 6433 .E85 T65 1991]

The book attempts to provide a comprehensive discussion of the sociopolitical impact of terrorism on Western societies, and, in particular, to explain the "modifications and inconsistencies" in their attitude towards terrorism. The primary focus of the book is not on specific antiterrorist strategies by Western liberal democratic governments; rather, it is the question of whether democracies are "terrorism-toler-

ating systems." The contributors to the volume focus their analysis on "support/in-difference/resistance" types of responses to terrorism by government and society in the cases of Spain, Germany, Israel, Belgium, and Italy. For example, while the Israeli government has always counteracted Palestinian terrorism with an armed response, it has, on occasion, tolerated Jewish rightwing nationalist terrorism against Palestinians and even commuted the sentences of some of the convicted members of such Jewish terrorist groups. In the concluding chapter, the editor writes that in practice liberal democratic governments will violate their own premises regarding antiterrorism when conditions do not present a perceived direct threat to their central interests or values.

Keyword(s): terrorism; antiterrorism; Europe; Middle East; theoretical aspects

Gearty, Conor. Terror. Boston: Faber and Faber, 1991. [Call Number: HV 6431.G36 1991]

The book questions whether the terms "terrorist" and "terrorism" have coherent meaning, because, according to the author, they are "value-laden" labels. To prove his thesis, the author discusses varieties of "terrorism" in the Middle East, Sri Lanka, India, Spain, Northern Ireland, Italy, and Germany. This is followed by a discussion of counterterrorism, and the threat to civil liberties posed by state overreaction. He rejects the attempt to strive for a comprehensive definition of terrorism, and advocates formulating an analytical spectrum of behavior at whose core activities are purely terrorist, but on its fringes are more ambiguous "scattered subversive acts." He concludes that applying the term "violent subversion" is less value-laden and places these actions in their proper "political and geographic context."

Keyword(s): terrorism; definition

Hewitt, Christopher. The Effectiveness of Anti-Terrorist Policies. Lanham, Maryland: University Press of America, 1984. [Call Number: HV 6431.H48 1984]

This study examines the policies that have been used against urban terrorism and evaluates their effectiveness. The book is divided into five sections. Chapter 1 describes, case by case, the social and historical background to the insurgency, the aims, organization, and social composition of the terrorist group and its internal and external support. Chapter 2 discusses the campaigns and the indicators used to measure terrorist violence. Chapter 3 examines the policies used to reduce terrorism and analyses their effectiveness. Chapter 4 contains a discussion of the findings, which attempts to place them in theoretical context. The study finds that the most effective antiterrorist strategy is likely to be one that uses a mix of policies appropriate to the specific national situation, and coordinated with one another.

Keyword(s): terrorism; counterterrorism; theoretical aspect

Hoffman, Bruce. "Current Research on Terrorism and Low-Intensity Conflict,." Studies in Conflict and Terrorism, 15, January-March 1992, 25-37. [Call Number: HM 136 .S85]

The article surveys the literature on terrorism and low-intensity conflict (LIC). It assesses the role that this research can perform in countering such challenges and evaluates the contribution of current research to our understanding of these issues. It argues that "policy-relevant research" is needed in this area, particularly as U.S. security concerns and interests are increasingly affected by an escalation of LIC-type conflicts around the world. There is also a need to provide the U.S. with clear definitions of what its interests are and how they can be expressed, because without such a conception its goals and efforts are bound to fail. Regarding future trends, Hoffman writes that research should focus on how the next generation of terrorist organizations are sustained, recruit new members, improve their methods of operation, and counteract new government measures against them. A corollary effort is

needed to research emerging patterns of terrorist activity, particularly the use of children as terrorism's new "shock troops."

Keyword(s): terrorism; low-intensity conflict; counterterrorism; U.S. Government policy; future trends

Janke, Peter (ed.). Terrorism and Democracy: Some Contemporary Cases. New York: St. Martin's Press, 1992. [Call Number: HV6431.T4613]

This book is a case study of the way in which five democratic countries--Italy, Canada, West Germany, the Netherlands, and Japan have responded to indigenous terrorist groups. The terrorist groups examined include Red Brigades (Italy), Quebec Liberation Front (Canada), Red Army Faction (Germany), the South Moluccans (the Netherlands) and Japanese Red Army (Japan). Each case study provides a history of the terrorist group, profiles of group leaders and their political objectives, the organization and capabilities of the group, and an assessment of how the group perceived and manipulated public opinion. Cooperation among government agencies responsible for counterterrorism and antiterrorism in the five countries is evaluated to illustrate both successful and unsuccessful policies and operations.

Keyword(s): terrorism; antiterrorism; counterterrorism

Kane, Terry Richard. "Prosecuting International Terrorists in United States Courts: Gaining the Jurisdictional Threshold," Yale Journal of International Law, 12, Summer 1987, 294-341. [Call Number: JX1.Y34]

The variable ways in which nations enforce international conventions, extradition, and other international and national laws in dealing with international terrorists are described in this article. Kane examines all of the international conventions and U.S. laws pertaining to international terrorists. He concludes that the United States has fulfilled its obligations to promulgate laws that honor all of the existing conventions on terrorism. However, he maintains that the U.S. Government must go further

to "ensure that its criminal jurisdiction comprehends every conceivable type of terrorist activity against U.S. citizens." A major problem that allows many international terrorists to go free, or at least go unprosecuted for their crimes, concerns how nations interpret their political exception statutes. The author provides several illustrations of how nations friendly to the United States, such as France and Germany, have refused to extradite individuals who hijacked U.S. aircraft and held U.S. citizens hostage. However, Kane believes that if the United States expands its body of law to depoliticize the extradition of terrorists, other nations will be influenced to enact similar laws.

Keyword(s): terrorism; counterterrorism; U.S. Government policy; legal aspects; international relations

Koch, Noel. "Hostage-Taking and Terrorism: A Review and Assessment of U.S. Policy,." Mediterranean Quarterly, [Durham, NC], 1, No. 2, Spring 1990, 106-121. [Call Number: D839.M42]

This article is a critical analysis of the Reagan administration's no-negotiations and no-concessions policy on terrorism. Sections one and two provide brief studies of how and why foreign-based terrorists attacked Americans in the 1970s and 1980s and suggests that most foreign governments, particularly U.S. allies in Europe, viewed the U.S. government's policies on terrorism as incomprehensible and ineffective. Sections three and four compare the U.S. Government's no-negotiations and no-concessions policy with more flexible approaches used by European countries. Most of these nations employ various types of negotiation tactics during hostage-taking incidents in order hopefully to save the lives of the terrorists' victims. Section five examines the June 1985 hijacking of a TWA passenger aircraft in Beirut as an illustration of how the U.S. sometimes makes concessions to terrorists despite the no-negotiations and no-concessions policy. Section six reviews the ef-

fect of the Reagan administration's 1986 decision to bomb terrorist bases in Libya. The author concludes that the U.S. Government's resolve to use military force against terrorists has helped to improve cooperation between the United States and European countries in addressing the problem of state-sponsored terrorism. Section six also examines the reasons hostage-taking is used less frequently today by terrorists than in the past. Koch argues that the terrorists may have won minor concessions from governments, for example gaining the release of imprisoned terrorists, but they lost political support for their cause by hostage-taking, and this is the primary reason for the decline of aircraft hijackings, embassy takeovers, and kidnappings of diplomats.

Keyword(s): terrorism; U.S. Government policy; antiterrorism

Kupperman, Robert, and Jeff Kamen. Final Warning: Averting Disaster in the New Age of Terrorism. New York: Doubleday, 1989. [Call Number: HV 6431 .K864 1989]

The authors argue that the United States, its allies and the Soviet Union are not adequately "prepared or oriented" to counter terrorism or other forms of low-intensity conflict. This results from inadequate antiterrorism systems and policies, which must be upgraded by means of new equipment, procedures, and personnel. The authors warn that in the future the United States should expect major terrorist attacks on its soil; there will be increased cooperation and working relationships among terrorist groups, leading to joint operations; and terrorist attacks will employ chemical, biological, radiological weapons against major infrastructure targets. Workable counterterrorism strategies, according to the authors, involve an "expanded menu" of measures and tactics, including legal and diplomatic options, intelligence, technological tools, military capabilities, covert options, and crisis management and emergency preparedness apparatus. In conclusion, the authors concede that there is

no panacea for terrorism, but recommend that an international police agency with wide-ranging powers and resources be created so that counterterrorism may prove effective in the long-term. For the United States to respond effectively to terrorism, they recommend relocating the Federal Emergency Management Agency (FEMA) in the White House, devoting more research and development to the technological arsenal for counterterrorism, and severely punishing states that provide safe haven and logistical support to terrorist groups.

Keyword(s): terrorism; low-intensity conflict; counterterrorism; antiterrorism; technology; international relations; future trends

Kurz, Anat. InTer: International Terrorism in 1989. Boulder, Colorado: Westview Press, 1990. [Call Number: HV 6431 .K885 1991]

The book, based on a data-base compiled by the Jaffee Center for Strategic Studies at Tel Aviv University, provides statistical data in the form of tables and figures on Middle Eastern terrorist incidents in 1989, as well as analyses of certain terrorism-related issues, such as activities by Lebanese Shi'ite and radical Palestinian terrorist groups. A chapter provides a chronology of international terrorist incidents for 1989, and the appendix lists organizations responsible for international terrorist incidents. One of the main findings is that 78.4 percent of all terrorist assaults involved "foreign objectives" in "perpetrators' own country," 9 percent of the incidents involved cross-border attacks, and 12.6 percent of the total incidents involved attacks beyond national borders. On the issue of future prospects, the authors find that a number of Middle Eastern "situational causes" are likely to activate the "logistical infrastructure and networks" of radical terrorist groups. The main cause is likely to be either a renewal or stagnation of a political process. The renewal of a major terrorist campaign, the authors believe, has been hampered by two developments occurring in 1988-89: the popular uprising of the Palestinian

Intifadah and the collapse of communism in Eastern Europe. One consequence of these two developments is that Middle Eastern terrorist groups may seek logistical aid from criminal elements and other terrorist groups in Western Europe. Finally, the PLO mainstream was not expected to launch major terrorist attacks because of the PLO's renunciation of terrorism in 1988. However, the authors conclude that such attacks may resume because "PLO diplomacy cannot be detached from its internal political considerations."

Keyword(s): terrorism; Middle East; future trends

Lambert, Joseph J. Terrorism and Hostages in International Law: A Commentary on the Hostages Convention. 1979. Cambridge: Grotius, 1990. [Call Number: K 5256 .A41979 1990]

The author writes that despite the proliferation of international terrorism and attention to this problem by government and scholars, differences of opinion over the definition of terrorism have resulted in the failure of the international community to adopt a consensual and comprehensive approach to combating the problem. There are no international conventions that deal with suppressing and punishing terrorism, and it is unlikely that any such instruments will be adopted in the future. Nevertheless, six conventions and two protocols dealing with certain offenses by terrorist groups have been promulgated so far, but they are not comprehensive in scope. The author focuses on the Hostages Convention because it represents the most significant measure that so far has been agreed upon by the international community to cooperate in the prevention and punishment of acts of international terrorism. Furthermore, its preparation was a significant step in the codification of international law and sheds light on the dynamics of multilateral treaty making. The study is divided into two parts: an introductory survey of the meaning of the term "terrorism," "types" of terrorism, the "problem" of terrorism, and efforts by the

United Nations to deal with it; and a commentary on the Hostages Convention. The author concludes that the most significant problem in prosecuting hostage takers is that most states are not yet parties to the convention. This has made the convention ineffective in many countries where hostage taking is endemic, such as Lebanon.

Keyword(s): terrorism; definition; counterterrorism; antiterrorism; international relations; international law; legal aspects

Laqueur, Walter. The Age of Terrorism. Boston: Little, Brown, 1987. [Call Number: HV 6431 .L36 1987]

The book examines terrorism in all its dimensions, including problems in defining the term; the subject of state sponsorship of terrorism; the distinction between terrorism and guerrilla warfare; the causes of terrorism; the "terrorist personality"; and the problem of counteracting terrorism.

Keyword(s): terrorism; counterterrorism; definition; future trends

Levitt, Geoffrey M. Democracies Against Terror: The Western Response to State-Supported Terrorism. New York: Praeger, 1988. [Call Number: HV6431.L49]

This book reviews counterterrorism agreements reached among members of the Group of Seven--United States, Canada, Germany, France, Italy, United Kingdom, Japan--at their annual summit meetings between 1978 and 1987. The author concludes that summit declarations targeting state-sponsored terrorism have been more effective in producing collective actions against the terrorists and the states involved than has the United Nations. Chapter one provides an overview of state-sponsored terrorism in modern times and discusses the reasons why citizens of the industrialized democracies have been the primary victims of this form of terrorism. Levitt views international terrorism as warfare used by weaker states to undermine the economic and political institutions of the United States and its allies. Chapter

two discusses the specific agreements reached at each of the Summit meetings. It shows how the seven member states improved their communication and expanded the scope of counterterrorism measures focusing on specific countries, objectives, and the types of economic, political, and military pressure to be used. Chapter three describes collective responses to specific actions. The 1986 U.S. military attack on terrorist bases in Libya backed by the political support of the other summit member states is believed to have been effective in curbing Tripoli's sponsorship of international terrorism in subsequent years. Chapter four discusses factors that limit counterterrorism cooperation within the summit power framework. First, each nation interprets agreements differently and the lack of formal institutional committees resulted in inconsistent responses to similar types of terrorist attacks targeting one of the seven states. Second, given that each nation has its own political and economic agenda vis-a-vis the state sponsors of terrorism, collective responses have a relatively short lifespan and areas of concern must be reaffirmed at subsequent summit meetings. The appendix provides the texts of each of the declarations on international terrorism published between 1978 and 1987.

Keyword(s): counterterrorism; antiterrorism; international relations

Long, David E. The Anatomy of Terrorism. New York: Free Press, 1990. [Call Number: HV6431 .L66 1990]

The author, a former Deputy Director of the Department of State's Office of Counterterrorism, discusses the component elements of terrorism by examining the nature of terrorism, terrorist behavior, the types of groups engaged in terrorism, sources of support for terrorism, terrorist strategy, tactics, and victims, and the most effective means governments can employ to combat terrorism. He believes that instead of formulating a generic definition of terrorism, which is a difficult task because virtually no characteristic of terrorism is present in equal strength in every

case, it is more useful to identify the most common characteristics associated with terrorism; these he groups into four general categories: goals, strategies, operations, and organizations. He also points out that understanding terrorism is complicated by the multiplicity of perspectives from which terrorism is viewed, namely, the general public, the terrorists themselves, and the persons who study and engage in combating terrorism. Politicians, diplomats, and intelligence professionals share a political perspective on terrorism; officials in the criminal justice system view it as a criminal act; whereas military and security personnel approach it as a form of lowintensity conflict. He believes that an effective counterterrorism policy must be global in nature and based on a comprehensive framework. It must be long-term in scope, adaptable to a variety of geopolitical circumstances, sufficiently broad as to accommodate many tactical considerations, based on international cooperation, and, finally, flexible. Thus, for the peaceful resolution of conflict some form of dialogue with terrorist groups may be required under certain circumstances. Nevertheless, some form of military response may be required, which he categorizes as hostage rescue operations, reprisal raids, restoring or maintaining civil order, and security measures. Of all the components of antiterrorism, he believes that the most important are intelligence measures. On the issue of organizing the United States government approach to countering terrorism, he does not believe that a new department headed by an antiterrorism "czar" would provide more effective policy coordination. Rather, it would increase bureaucratic infighting and would create tremendous overlapping of responsibilities with other government agencies. A more pragmatic approach, in his view, would involve creating a governmentwide system for antiterrorist policy coordination, led by a senior official, to monitor activities to ensure that they are rationally executed. The Department of State should remain the lead agency in the counterterrorism effort in the international arena, with

domestic terrorism overseen by the FBI. Finally, although it is difficult to predict future trends, he expects terrorism to persist because there has been no constructive change in the insoluble political and economic problems that have given rise to terrorism in the first place. Narcoterrorism is expected to increase in intensity in the near term because of its growing terrorist infrastructure in Colombia and Peru, moreover, it is financially independent of outside sources of support. Also, the end of the Cold War is unlikely to decrease terrorism because the Third World has always been relatively independent of superpower rivalry, with most terrorist organizations, including Marxist groups, preoccupied primarily with their own local problems. This does not mean that today's terrorist leaders, groups, and state sponsors will continue to be dominant in the future, but that old leaders and groups will be replaced by new leaders and groups.

Keyword(s): terrorism; definition; counterterrorism; U.S. Government policy; intelligence; future trends

MacWillson, Alastair C. Hostage-Taking Terrorism: Incident-Response Strategy. New York: St. Martin's, 1992. [Call Number: HV 6431.M335 1992]

This book examines the problems governments face or are likely to face in handling a hostage situation. It seeks to address the specialized subject of crisis management when applied to terrorist hostage-taking incidents. Several aspects of hostage crisis management are discussed, including negotiation strategy, operational and support requirements, technical support requirements, psychological aspects of hostage taking, and incident resolution. In assessing future trends in hostage taking and government countermeasures, the author warns that hostage takers may become increasingly sophisticated in the technical, propagandistic, and psychological aspects of their operations, possibly resorting to multiple simultaneous incidents to overwhelm government antiterrorist units. Effective government countermea-

asures will require increased capability to conduct simultaneous negotiations involving more than one incident over a prolonged period of time, as well as enhanced protection and technical support for assault teams that may be subjected to increasingly effective armed resistance.

Keyword(s): terrorism; psychological aspects; technology; counterterrorism; future trends

Marks, John and Igor Beliaev (eds.). Common Ground on Terrorism: Soviet American Cooperation Against the Politics of Terror. New York: W.W. Norton, 1991. [Call Number: HV 6431 .C6473 1991]

The book is based on a report issued by the United States-Soviet Task Force to Prevent Terrorism, which met in Moscow in January 1989 and in Santa Monica in September 1989. Its goal was to find ways to counter terrorism as well as to establish cooperative arrangements between the former Soviet Union and the United States. After initially defining terrorism, the delegates proceeded to identify potential common approaches on the subject of cooperation. The Soviets admitted that they began to be concerned with international terrorism when four Soviet officials were kidnapped in Beirut in 1985. The Soviets agreed that a terrorist act associated with the Arab-Israeli conflict had the potential to trigger a more lethal widespread conflict, requiring practical preventive cooperation between the superpowers. The Soviets consider religious extremists among the large Muslim populations of the [former] Soviet republics to be a potential terrorist threat. The delegates also discussed new forms of violence represented by narcoterrorism and technoterrorism, with physical safeguards and research providing deterrence.

Keyword(s): terrorism; definition; counterterrorism; international relations; Soviet Union; United States; Middle East; Islamic groups; technology; future trends

Martin, David C. and John Walcott. Best Laid Plans: The Inside Story of America's War Against Terrorism. New York: Harper and Row, 1988. [Call Number: HV 6433.M5M37 1988]

This book examines U.S. counterterrorism policy from 1980 to 1987, focusing primarily on the "Desert One" and "Iran-Contra" operations. The authors argue that the Carter and Reagan administrations set poor precedents for U.S. counterterrorism policy when they overreacted to terrorist crises in the Middle East. By seeking total, short-term solutions to terrorist crises, the Carter and Reagan administrations compromised broader U.S. foreign policy interests and effectively fulfilled the terrorists' objective of paralyzing U.S. foreign policy and displaying U.S. weakness. The authors recommend a more consistent U.S. policy of sustained law enforcement pressure against terrorists, based on high-quality intelligence and international cooperation.

Keyword(s): counterterrorism; Middle East; Iran; Islamic groups; U.S. Government policy; international relations; law enforcement

Martin, John M. Multinational Crime: Terrorism, Espionage, Drug & Arms Trafficking. Newbury Park, CA: Sage, 1992. [Call Number: HV 6252 .M37 1992]

The authors examine multinational systemic crime, which they define as a collective term referring to the four types of transnational criminal behavior systems involving terrorism, espionage, drug trafficking, and arms trafficking. According to the authors, multinational crime systems are often interrelated and are a threat to the national security of states; there is, however, no global criminal justice system to cope with the challenge of globalized crime. The authors conclude that the task of developing a theory to explain multinational crime and a policy to control such behavior is complicated by the fact that the four subtypes are often interrelated in various ways, may all occur at the same time in the same geographical area, and

may involve the same or different groups. The authors present three case studies to illustrate their thesis: narcotics in Southeast Asia's Golden Triangle; cocaine, economics, and political power in the Andean region of South America; and organized violence in the Middle East.

Keyword(s): terrorism; narcoterrorism; future trends

McCauley, Clark (ed.). "Terrorism Research and Public Policy: An Overview." Pages 126-44 in Terrorism Research and Public Policy. London: Cass, 1991. [Call Number: HV6431.T495]

This chapter of the book has three salient points. First, the author suggests that the U.S. Department of State's definition of terrorism is more a classification term than a definition of all of the psychological, sociological, political, and other factors that are components of this form of violence. McCauley advises researchers and policymakers continually to update their knowledge about the causes and evolution of terrorism and to attempt to understand how the terrorists view themselves. Second, the author suggests five ways that policymakers can view antiterrorist policies. These are: terrorists are human beings and must be dealt with as such during negotiations; antiterrorist policies are coping strategies, not solutions; mistakes in resolving incidents can be more harmful to the government than to the terrorists; antiterrorist policies involve communications to diverse audiences with diverse effects; and a no-response policy can be an active and effective antiterrorist policy. Third, McCauley proposes five areas of research for policymakers to assist them in formulating counterterrorist and antiterrorist strategies in the future. The recommended areas of research include audience research, minority group influence on the majority, studies of how individuals develop psychological patterns of internalization or compliance, factors that motivate all fighting men, the difference between instrumental and expressive aggression, the study of prosocial extremism, and the

study of the group dynamics of opposition groups to provide early warning on the possible evolution of opposition groups including terrorists.

Keyword(s): terrorism; antiterrorism; definition

Mickolus, Edward F. Terrorism, 1988-1991: A Chronology of Events and a Selectively Annotated Bibliography. Westport, CT: Greenwood Press, 1993. [Call Number: HV 6431 .M498 1993]

This 916-page book is divided into two parts. The first part provides a chronology of international terrorist incidents for the years 1960 to 1991. The second part consists of a bibliography on terrorism arranged according to particular subjects (general topics, regional approaches, special topics, approaches to response, and terrorism topics in fiction).

Keyword(s): terrorism; database

Murphy, John F. State Support of International Terrorism: Legal, Political, and Economic Dimensions. Boulder: Westview, 1989. [Call Number: HV 6431.M87 1989]

This book develops a typology of state support and state sponsorship of terrorism. Chapters 1 and 2 define international terrorism and state support of international terrorism. Chapter 3 considers what steps might be taken to improve the gathering of information regarding international terrorism and state support of it. Chapters 4 through 6 review possible responses to state support of international terrorism, including quiet diplomacy, public protest, international and transnational claims, economic sanctions, and military responses. The primary focus is on the legal aspects of these responses, but political, economic, and cultural dimensions are also discussed. The author concludes that, in responding to terrorism, the major emphasis should be on finding more creative ways to respond other than through the use of armed force. Article 51 of the United Nations Charter is, in effect, a

savings clause that permits resort to force, but only if necessity permits no other recourse.

Keyword(s): terrorism; state sponsorship; counterterrorism; intelligence; international relations; international law; legal aspects

O'Brien, William V. Law and Morality in Israel's War With the PLO. New York: Routledge, 1991. [Call Number: DS 119.7 .O27 1991]

The book analyzes the low-intensity type of warfare between Israel and the Palestine Liberation Organization (PLO) from 1965 to the present, and assesses Israel's counterterrorism policies in terms of the international law of war and modern "just-war" doctrine. The author also examines the two belligerents' political and military strategies toward each other, ranging from terrorist raids and Israeli counterattacks, to the 1982 Lebanon War, and the Palestinian Intifadah (uprising). He considers Israeli policies towards the West Bank and the Gaza Strip in terms of the law of belligerent occupation, and Israel's military actions against the PLO in Arab sanctuary states in terms of legal and moral "permissibility." O'Brien concludes that it is important for states engaging in retaliatory measures to constantly review their strategies and tactics to ensure that they "conform to the principles of proportion and discrimination." While he finds Israel to be "engaged in a just war" against the PLO, he cautions that a "just belligerent" still must "exhaust peaceful alternatives to war, so that war is a last resort, and that a just belligerent must have right intention."

Keyword(s): terrorism; Middle East; Israel; counterterrorism; legal aspects; international law

O'Neill, Bard E. Insurgency & Terrorism: Inside Modern Revolutionary Warfare. Washington: Brassey's, 1990. [Call Number: U 240. O54]

The book provides a framework for analyzing and comparing terrorist and guerrilla based insurgencies, including a definition of insurgency, insurgent goals and strategies, and government response. Types of insurgencies range from anarchist, egalitarian, traditionalist, pluralist, secessionist, reformist, and preservationist. O'Neill emphasizes that government response is the most important variable affecting the course of an insurgency. This response involves adopting an appropriate strategy to counteract the insurgents in their physical environment, their level of popular support, their organization and cohesion, and their external support. He concludes that in the future insurgencies will continue to threaten many nations, including the superpowers.

Keyword(s): terrorism; low-intensity conflict; guerrilla warfare; counterterrorism; future trends

Odom, William E. On Internal War: American and Soviet Approaches to Third World Clients and Insurgents. Durham, NC: Duke University Press, 1992. [Call Number: D 883 .Q36 1992]

One of the author's theses is that the end of the Cold War will not remove the threat of terrorism or internal wars, and that other sources are replacing the former Soviet Union as providers of material support to insurgents or terrorists in the Third World. In the near term, internal wars are likely to break out in the Caribbean and Central America, parts of Southeast Asia, and the Middle East and Southwest Asia. To refine the ability to anticipate where internal wars are likely, the author identifies their sources as the nature of their colonial experience, the religious context of their societies, their ethnic heterogeneity, border disputes, and the presence of landless peasant populations. He identifies the critical predictive source to be the political factor--the capacity of regimes to manage internal disorders. Thus, some states that might otherwise contain potential sources of internal war are relatively stable, such

as Turkey, Pakistan, Mexico, and Iraq. The author concludes that whereas global engagement is becoming the thrust of U.S. foreign policy in the 1990s, it is important to understand "how and where" it can be more effectively involved in limited conflicts. First, the choice has to be made where to get involved; second, it is imperative to undertake a political analysis of the societies confronting internal war; third, economic assistance should combine government and private sector initiatives; fourth, the military component of the counterinsurgency strategy must take into account internal as well as external aspects of the insurgency; and, finally, political, economic, and military strategies must be integrated.

Keyword(s): terrorism; low-intensity conflict; U.S. Government policy; future trends

Paschall, Rod. LIC 2010. Washington: Pergamon-Brassey's, 1990.

[Call Number: U240.P38]

This book predicts that while improvements in international cooperation and stronger national counterterrorism programs are likely to contribute to a decrease in the number of terrorist groups in the future, some of the terrorist incidents probably will be more violent. The author, a former commander of the U.S. Army's Delta Force, discusses recent events in the world, including the use of more sophisticated bombs and weapons by terrorists, as indicators of what policymakers must be prepared to face in the future. Paschall proposes ways to look forward in time and plan for future conflict. The recent past has shown that commando raids on foreign terrorist bases in nations that sponsor terrorism are an effective foreign policy tool. He suggests that commando forces be trained to collect evidence of a group's involvement in terrorist activities during such raids. The U.S. Government can utilize such information in a number of ways in its counterterrorism program. Although Paschall acknowledges the importance of the media in democracies, he believes democratic

governments will have to enact stronger prohibitions on media coverage of terrorism. Because publicity encourages terrorists to seek more sensational ways of obtaining media attention, stricter laws would effectively remove this tactic from their arsenal.

Keyword(s): terrorism; future trends; counterterrorism; U.S. Government policy; media

Pearlstein, Richard M. The Mind of the Political Terrorist. Wilmington, Delaware: SR Books, 1991. [Call Number: HV 6431 .P43 1991]

The author examines the social psychology of political terrorism, with emphasis on the individual psychology of the political terrorist. He concludes that political terrorists are characterized psychologically by certain narcissistic personality disturbances that predispose them toward the psychodynamic rewards of political terrorism. This conclusion is based on an analysis of individuals from various nationalities and socioeconomic status who became political terrorists. The book's chapters deal with the nature of political terrorism, the individual psychology of the political terrorist, the narcissistic psychological rewards offered by political terrorism, and profiles of prominent terrorists. In the concluding chapter the author discusses the ultimate utility, operational consequences, and applicability of his study's findings to the three "most bewildering" issues in contemporary terrorism: hostage negotiations and other bargaining with terrorists, the role of the news media in providing psychodynamic rewards to terrorists, and predicting the tactical nature of future terrorist attacks. His findings lead him to conclude that because negotiating with terrorists is frequently necessary it is important to "know thine enemy;" that the news media has given the political terrorist a "mask of omnipotence rather than the mask of villainy," and placed the political terrorist on an equal footing with government officials; and that the psychological profile of terrorists predisposes

them to carry out "superterrorist" types of acts in the future, involving the use of nuclear, chemical, or biological weapons, even though such acts may ultimately be counterproductive in attaining their political objectives. Such acts, he writes, would provide terrorists with the "most profound psychic sense of omnipotence."

Keyword(s): terrorism; psychological aspects; media; future trends

Pluchinsky, Dennis A. "Middle Eastern Terrorism in Europe: Trends and Prospects,." Terrorism, 14, No. 2, April-June 1991, 67-76. [Call Number: HV 6431.T46]

Europe has been the preferred operational area for Middle Eastern terrorist groups--some 418 attacks from 1980-1989. Unlike European Marxist revolutionary or separatist terrorist groups, the Middle Eastern groups present Europe with a regional security problem. The character and objectives of Middle Eastern terrorist activity in Western Europe have changed substantially since the 1970s, when the dominant theme was the quest for world recognition of the Palestinian cause and the primary tactics were hijackings and attacks on diplomatic facilities. During the 1980s, the dominant theme was the support and sponsorship role of Middle Eastern states like Syria, Libya, Iran, and Iraq. The author estimates that 152 terrorist incidents, or 42 percent of all Middle Eastern terrorist activity in Western Europe during the 1980s, can be evidentially or analytically linked to these four states. In the mid-1980s, there was also a clear shift in Middle Eastern targeting in Western Europe: toward Western targets, in particular the United States. The 1980s marked the first time that a Western government (the United States) carried out military retaliation against another government (Libya) because of its support for international terrorism. It was also the first time that a Middle Eastern state (Iran) had unofficially declared a terrorist war against a European state (France). There are four factors that argue for continued Middle Eastern terrorist activity in Western Europe in the 1990s. First, it appears likely that the controversial political issues and intra-Pales-

tinian and inter-Arab feuds that trigger Middle Eastern terrorist activity are a long way from being resolved. A second factor is the continued existence of Middle Eastern personalities like Yasir Arafat, Ahmad Jibril, Abu Nidal, Muammar Qaddafi, Saddam Hussein, Hafez al-Assad, Abu Abbas, and the like who show a continued willingness to use terrorism. A third factor is the continued attractiveness of Europe as a theater of operations for Middle Eastern terrorist groups, especially after the elimination of internal border controls and the collapse of the East European security apparatus. And, finally, the involvement of the United States-led coalition in the Persian Gulf conflict and the military defeat of Iraq may provoke Saddam Hussein into using terrorism to settle the score with the West. The author concludes that an objective analysis of the current Middle Eastern terrorist situation in Europe strongly suggests that Middle Eastern terrorism in Europe will continue to be a major security problem for Europe and the United States in the 1990s.

Keyword(s): terrorism; Europe; future trends; Islamic groups

Post, Jerrold M. "Rewarding Fire with Fire: Effects of Retaliation on Terrorist Group Dynamics,." Terrorism, 10, No. 1, 1987, 23-35. [Call Number: HV 6431.T46]

Comparative studies of the psychology of terrorism indicate that there is no one terrorist mind-set. A common theme among the disparate groups is the strong need of marginal alienated individuals to join a group of like-minded individuals with a similar world view that "it's us against them, and they are the cause of our problems." This strong need to belong gives particular force to the power of group dynamics. Whereas ideology is the glue that holds the group together and serves as the rationale for its actions, terrorists do not commit acts of terrorism for ideological reasons. The amelioration of societal injustice which they indicate incites and justifies their terrorism does not reduce the lure of terrorism because of the powerful

hold of the group on its members. Paradoxically, a policy of reactive retaliation with the goal of deterring terrorist acts may have the opposite effect and reinforce the mind-set of the terrorist. For the group under threat, the external danger has the consequence of reducing external divisiveness and uniting the group against the outside enemy. The survival of the group is paramount because of the group identity it provides. Identifying the locus of control is of crucial significance in estimating the effects of counterterrorist policies upon a terrorist group. For the autonomous terrorist cell, active retaliation may reinforce the cohesion of the group; for the corporate terrorist organization, issues of organizational survival may become paramount. Neither the terrorist group nor the terrorist organization can be forced to give up terrorism, for to do so would be to lose their reason for being. For state-sponsored and state-directed terrorist groups on the other hand, the terrorist group in effect serves as a paramilitary group under central government control. In this situation, group and organizational considerations are less relevant, because the object of the counterterrorist policy is the government of the sponsoring state. Because the survival of the state and national interests are the primary values, retaliatory policies can, in the short run, have a deterrent effect. In the long run, the most effective antiterrorist policy is one that renders the terrorist career less attractive to potential members, facilitates terrorists leaving the group, and reduces external support.

Keyword(s): terrorism; state sponsorship; psychological aspects; counterterrorism; theoretical aspects

Probst, Peter S. "The Terrorist Specter of the 1990s,." Defense 92, January/February 1992, 18-27. [Call Number: Not in LC]

This article examines future trends in terrorism in the post-Cold War era and the aftermath of the 1991 Gulf War. It argues that the Allied victory in the Gulf War served to damage a number of Middle Eastern terrorist groups, particularly the PLO,

resulting in a power vacuum filled by Islamic fundamentalist groups with Iranian links, such as Hamas and the Palestinian Islamic Jihad. These groups represent a potent surrogate for Iran, particularly in Jordan and the Israeli occupied territories of the West Bank and the Gaza Strip. Iranian-backed radical fundamentalist groups also represent a threat to Europe, where there are growing Muslim populations in Germany and France. A second phenomenon is the collapse of communist regimes in Eastern Europe and the former Soviet Union, resulting in the deterioration of internal security and law enforcement capabilities in these countries. Thirdly, the author predicts that there will be an escalation in terrorist activities in Europe by small, fanatical, ideological, ethnic, and separatist groups. The nature of terrorist operations will also change, characterized by the use of biological and chemical weapons.

Keyword(s): terrorism; counterterrorism; future trends

Rapoport, David C. "Terrorism." Pages 1061-79 in Encyclopedia of Government and Politics. Vol. 2. Mary Hawkesworth and Maurice Kogan (eds.). New York: Routledge, 1992. [Call Number: JA 61 .C66 1991]

The article discusses the evolution of the term "terrorism," its effects, conditions that produce terrorism, and counterterrorist policies. Terrorism, according to the author, has undergone four distinct evolutionary phases. The first phase was a feature of the French Revolution. The second phase began after the First World War and reached its climax after the Second World War. The third phase, which began in the late 1960s and was associated with the Vietnam War, introduced the term "international terrorism" to describe the fact that certain terrorist groups conducted most of their assaults abroad. The fourth phase, which emerged in the Third World in the 1970s, introduced a new form of "sacred terror," with tactics and targets shaped by religion. The author attributes technological, psychological, and con-

spirational explanations to the origins of terrorism. On the issue of future trends, the author writes that terrorism will always be a feature of the political landscape, although its "ebb and flow" cannot be forecast. One of the great watersheds in terrorist history is the transformation of the Soviet bloc, but the significance of this change is "unclear." One new development is the revival of "spontaneous mass insurrection"; another is the escalation in the number of new separatist movements, which the author terms the "most tenacious terrorist groups." The author concludes that the greatest anxiety about the future is the possibility that terrorists will employ weapons of mass destruction, although their desire to gain public support is a major inhibition against such warfare.

Keyword(s): terrorism; definition; counterterrorism; future trends

Reich, Walter, (ed.). Origins of Terrorism: Psychologies, Ideologies, Theologies, States of Mind. New York: Woodrow Wilson International Center for Scholars and Cambridge University Press, 1990. [Call Number: HV 6431 .Q74 1990]

Whereas the first half of the book focuses on the psychology of terrorism, the second half discusses the psychology of governmental responses to terrorism and future research on the psychology of terrorism. With regard to counterterrorism, the chapter on "Hostage taking, the presidency, and stress," by Margaret G. Hermann and Charles F. Hermann, discusses the challenge and the stress that hostage taking poses to a U.S. president. The chapter on "Taking vows: The domestication of policy-making in hostage incidents," by Gary Sick, analyzes the stresses that the 1979 Iranian hostage situation induced on President Jimmy Carter. In the chapter on "Questions to be answered, research to be done, knowledge to be applied," Martha Crenshaw outlines the most important questions regarding the psychology of terrorism, questions that need further research. These questions deal with the extent of interest by government and society in acquiring knowledge about terror-

ism and the causes, conduct, and consequences of terrorism. Crenshaw believes that the integration of these two levels of analysis should be dealt with by future research on terrorism, in addition to the need for more comparative research and for more cumulative research patterns. Walter Reich's chapter on "Understanding terrorist behavior: The limits and opportunity of psychological inquiry" argues that whereas several aspects of terrorism are of interest to psychological inquiry, the greatest interest lies in the psychology of the terrorists themselves. Such a psychological inquiry, however, is constrained by a number of problems; the chapter attempts to suggest how these problems can be avoided or overcome. Reich considers these problems to be overgeneralization in defining terrorism, reductionism in attributing specific characteristics or causes to a wide range of terrorists and terrorist groups, inadequate appreciation of the rewards of belonging to terrorist groups, using highly scientific terms to describe what are basic terrorist feelings and motivations, ignoring rational reasons for choosing a terrorist strategy, inaccessibility to direct research on terrorism, and ignoring terrorism carried out by states against their own people, including destructive acts by Western governments. Reich's suggestions for future research include recognizing that terrorism is varied and complex, and that the motivations, aims, and forms of behavior of terrorism different; understanding the history of terrorism; studying the benefits of the terrorist life; analyzing the psychology of state terrorists; examining the connections between a terrorist group and its supporting community; examining the consequences of state countermeasures; adducing why some radical opposition groups embark on terrorism while others pursue peaceful means to achieve their goals; and, finally, determining what induces terrorists to end their terrorist careers.

Keyword(s): terrorism; psychological aspects; counterterrorism; theoretical aspects

Revell, Oliver B. "Structure of Counterterrorism Planning and Operations in the United States,." Terrorism, 14, No. 3, July-September 1991, 135-44. [Call Number: HV 6431.T46]

This article, by an official of the Federal Bureau of Investigation (FBI) describes the FBI's counterterrorism capabilities and examines interagency counterterrorism cooperation among the FBI, local law enforcement, international law enforcement, and the federal community. It provides a brief description of the FBI's mission in combating terrorism, and of the FBI offices and units that carry out the agency's antiterrorism mandate. These include the Counterterrorism Section at FBI Headquarters in Washington, the Hostage Rescue Team (HRT), and the special weapons and tactics (SWAT) teams maintained by the 56 FBI field divisions nationwide. In addition, the article describes FBI programs and cooperative efforts with local and state authorities to combat terrorism. These include joint terrorism task forces with state and local law enforcement agencies, the domestic threat warning system, and the key asset protection program. At the federal level, the FBI participates in a variety of interagency policy coordination groups, such as the Protective Security Working Group, which the FBI chairs, and the Policy Coordinating Committee on Terrorism, chaired by the Department of State. Finally, the FBI participates in a variety of multinational fora and organizations dedicated to combating international terrorism. These include INTERPOL, the TREVI Group, the Quantico Working Group, the ItalianAmerican Working Group, and the International Association of Chiefs of Police Committee on Terrorism. The author concludes that the structure of the national counterterrorism program is a sound one. This is attributed largely to the ongoing cooperation at all levels in the United States and with the FBI's foreign counterparts. One of the strongest tools in the fight against terrorism is the exchange of vital information and cooperation in pursuing

common goals. Cooperation and exchange of intelligence must continue for the United States to effectively meet the challenges of terrorism in the 1990s and beyond.

Keyword(s): counterterrorism; law enforcement; United States; U.S. Government policy

Rubenstein, Richard A. Alchemists of Revolution: Terrorism in the Modern World. New York: Basic Books, 1987. [Call Number: HV 6431 .R83 1987]

The author examines the psychology of terrorism and its social causes; compares the theories and practices of major schools of terrorism such as anarcho-communist, nationalist, and fascist; investigates the relationship between terrorism and social revolution; and defines the role of terrorists in national liberation struggles. One of his major points is that although terrorism may be the product of certain grievances, it is primarily generated by the "political weakness of militant intellectuals unable either to organize mass violence or to attract reliable allies to their cause." This "disconnection" of intellectuals, he argues, is the main "internal cause" of terrorism and shapes its "philosophy, tactics, and consequences." Rubenstein concludes by offering four policy recommendations to resolve the threat of terrorism: distinguishing long-term policy from short-term response; developing long-term policies based on in-depth analysis of a particular terrorist group and its needs; mobilizing scholarly resources to define terrorist grievances; and terrorist group leaders and government officials should engage in the "process of conflict resolution."

Keyword(s): terrorism; psychological aspects; theoretical aspects; counterterrorism

Schmid, Alex P., and Albert J. Jongman (eds.). Political Terrorism: A New Guide to Actors, Authors, Concepts, Data Bases, Theories, and Literature. New Brunswick, NJ: Transaction 1988. [Call Number: HV 6431.S349 1988]

This reference source is divided into four main parts: a collection of essays on various aspects of terrorism, a narrative review of literature on terrorism, a selected bibliography of terrorism related works, and a world directory of terrorist and other organizations associated with guerrilla warfare, political violence, and protest. Part one contains essays by recognized authorities on various aspects of terrorism. Essays are grouped into three sections on "definitions," "typologies," and "theories." Part two contains two sections reviewing databases and literature on terrorism. Part three consists of a bibliography containing 5,831 separate entries covering the world-wide literature on terrorism. Part four consists of a directory of significant terrorist organizations worldwide.

Keyword(s): terrorism; definition; counterterrorism; guerrilla warfare; low-intensity conflict; future trends; U.S. Government policy

Schmid, Alex P., and Ronald D. Crelinsten (eds.). Western Responses to Terrorism. Totowa, NJ: Frank Cass, 1993. [Call Number: HV 6433 .E85W47 1993]

This book is based on the proceedings of a conference held under the auspices of Leiden University. The book is divided into three parts. Part I discusses some of the problems encountered by Western governments in responding to terrorism. Part II examines the experiences of selected European countries in countering terrorism (The Netherlands, Spain, West Germany, Italy, Britain, and Austria). Part III presents a critique of selected issues in responding to terrorism, such as counterterrorist strategy, negotiating with terrorists, keeping track of terrorists following European integration in 1992, and an assessment of Western responses to terrorism in the course of a 25-year period.

Keyword(s): terrorism; antiterrorism; Europe

Smith, G. Davidson. Combating Terrorism. New York: Routledge, 1990. [Call Number: HV 6431.S64 1990]

This book is a comparative study of counterterrorism efforts in Canada, Britain, and the United States. The author's perspective tends to be Canada-centered, with a disproportionate amount of discussion devoted to Canada's counterterrorism experience in comparison with British and U.S. counterterrorist policies and practices. The focus is retrospective, with particular attention given to counterterrorism during the 1970s and 1980s. Except in connection with general recommendations, there is relatively little discussion of future trends. The vulnerability to terrorism of Canada, Britain, and the United States is aggravated by the liberal democratic character of their societies, which makes them "soft" targets for terrorist acts. In developing policies toward terrorism, Canada, the United States and Britain have been consistent, clear, and firm in regard to their policy of no concessions, international cooperation, and the rule of law. With certain arguable exceptions, notably involved with the no-concessions principle, the three nations maintained that posture through the 1970s and into the 1980s. Inherent with the rule of law, however, is the philosophy of use of force. It calls for a minimum application of force unless resort to the maximum cannot be avoided. In 1984 the US departed from that philosophy by endorsing the conduct of preemptive strikes and reprisal raids against terrorists abroad. Implicit within the change in policy direction was the use of military force to carry out the actions. Terrorism, especially of a state-sponsored nature, was described as "a weapon of unconventional war against democratic societies."

Keyword(s): counterterrorism; U.S. Government policy; Britain; Canada

Wardlaw, Grant. Political Terrorism: Theory, Tactics, and Countermeasures. (rev. ed.) Cambridge: Cambridge University Press, 1989. [Call Number: HV 6431.W365 1989]

The aim of this book is to outline the important policy considerations that confront a democratic state in trying to combat terrorism and at the same time remain democratic. Part one attempts to provide a comprehensive introduction to the definition, history, theory, operation and effects of terrorism as an essential background to policy analysis. Part two analyzes counterterrorist policies. It begins by outlining basic policy choices and then looks at specific policy areas such as the role of intelligence agencies, the use of the armed forces, the development of antiterrorist legislation and international treaties, and the issue of regulation of media reporting of terrorist incidents. Developments in the strategic dimension of terrorism are discussed in chapters on the importance of hostage taking to international terrorism and issues surrounding state involvement in international terrorism.

Keyword(s): terrorism; definition; theoretical aspects; state sponsorship; counterterrorism; international law; international relations; media

Wilkins, Burleigh Taylor. Terrorism and Collective Responsibility. London: Routledge, 1992. [Call Number: HV 6431 .W55 1992]

The author, a philosopher, argues that one of the problems in discussing terrorism is that there is no agreed upon definition of the term, and that some definitions only serve to condemn the act of terrorism. Government agencies use definitions of terrorism to justify and favor their own activities and budget in this area. Thus, the Department of State defines terrorism to emphasize terrorists' political motivations, whereas the Federal Bureau of Investigation defines terrorism as the "unlawful nature of terrorist violence." The author attempts to resolve these methodological issues by proposing a minimal definition of terrorism that might gain acceptance.

This definition is that "terrorism is the attempt to achieve political, social, economic, or religious change by the actual or threatened use of violence against persons or property; the violence employed in terrorism is aimed partly at destabilizing the existing political or social order, but mainly at publicizing the goals or cause espoused by the terrorists; often, though not always, terrorism is aimed at provoking extreme countermeasures which will win public support for the terrorists and their cause; terrorism will be perceived by its practitioners as an activity aimed at correcting grave injustice which otherwise would be allowed to stand." The author believes that while terrorism may be inimical to the values of liberal democracy, under certain conditions it can be morally justified--even though it is morally wrong in the sense that it involves the violation of the rights of innocent persons who may be killed or harmed. He further argues that the 'moral fanatic' will still engage in terrorism even though it may fail to produce political change or the collapse of the state. The author concludes that it may be warranted to strike against members of terrorist groups because they are conspirators, but it may be less morally justified to strike at the larger groups that terrorist groups claim to represent, or even their 'host' communities or nations.

Keyword(s): terrorism; definition; counterterrorism; U.S. Government policy

Wilkinson, Paul. Terrorism and the Liberal State. (rev. ed.) New York: New York University Press, 1986. [Call Number: JC 328.6.W54 1986]

This book examines the nature of the terrorist threat to liberal democracies. Part I attempts to clarify and refine the concept of political terrorism, to establish a working typology of political terrorism, and to relate terrorism to other modes of violence and to the basic political values, structures, and processes of liberal democracy. Part II, the heart of the book, deals with the special problems of revolutionary and subrevolutionary political terrorism in liberal democracies. It discusses the under-

lying and precipitative causes of terrorism in liberal states and assesses influential causal and developmental theories and models of terrorism under these conditions. Part III analyzes specific problems of skyjacking, diplomatic kidnappings, embassy attacks and assassinations and possible national, bilateral, regional, and international countermeasures and cooperative action against these forms of terrorism. One of the main conclusions is that there are effective measures democracies can take to defend the innocent and uphold the rule of law without putting basic civil liberties and democracy at risk. Firmness and determination to uphold the rule of law is the keynote of the approach advocated in the present work.

Keyword(s): terrorism; theoretical aspects; counterterrorism; legal aspects; international relations; international law; international relations

Appendix C

Preliminary Scenarios

1. NO SURPRISES: Our baseline future extends the world of 1993. It extends all of the trends presented in the appendices, giving each the weight it appears to carry in the world today.

In this future, as in the present, the end of the Cold War has reduced the threat of global conflict, but powerful defense forces remain essential. The world is multipolar. The United States leads the North American bloc--the proposed North American Free Trade Association--and competes with at least four others, including South America; the European Community; Japan and its Asian allies; and Southeast Asia, Australia, and New Zealand. These are opportunistic, unstable alliances that shift as trade requirements dictate.

The nation-state remains the basic political organization. Yet its sovereignty and freedom of action are constrained by the growing interdependence of societies that, on balance, have become more cooperative and homogeneous.

The United States faces difficult challenges. It cooperates closely with other major powers, yet must compete against them economically. In the developing world, rapid population growth spawns social unrest and encourages mass migration; the result is a rapid influx of illegal immigrants and refugees. Some of the new arrivals bring their politics with them. Terrorism is an enduring threat. And advanced weapons systems are finding their way into the hands of Third-World dictators.

Despite these pressures, conventional war is less common. Unfortunately, it is also more lethal and costly, thanks to the technological sophistication of modern weapons. Arms-control agreements, monitored by remote-sensing satellites, are the first line of defense against aggression. Collective warfare modeled on the Gulf War coalition is held as a last resort.

In sum, the United States will find this future safer than the Cold-War past.

2. HOLY WAR: The Cold War of ideological conflict is replaced by a much hotter war of terrorism, emanating largely from radical, violent Islamic extremists, who seek the destruction of Western culture and values. This schism between the Muslim and non-Muslim worlds transcends geographic and cultural boundaries and has the potential to create rifts in international politics as deep and enduring as any we have experienced in this violent century. By 2010, the pan-Islamic movement has installed governments modeled on Teheran in many of the Muslim countries, while fundamentalist extremists have hidden themselves like raisins in the oatmeal of the Western democracies. Muslim extremists control up to fifteen states in the Islamic world, and fundamentalist Islam governs their societies and politics.

Though this scenario is tightly focused on Appendix D, Trends 43 through 45, and especially Trend 44, a variety of trends contribute to the world that emerges from it. Population growth in the Third World (Appendix D, Trend 1) provides a large reservoir of young people with little hope of a better future, the ideal recruiting pool for potential terrorists. Growing water shortages (Appendix D, Trend 10) and the declining cost of oil (Appendix D, Trend 12) add to the difficulty of life in the Middle East, raising the level of dissatisfaction. The growing prosperity of the industrialized lands (Appendix D, Trend 35), aided by the decline of trade barriers and the expansion of trade (Appendix D, Trend 36), will leave the Third World further behind, while improved communication (Appendix D, Trends 21 and 22)

ensures that people in the developing nations understand how luxuriously people live in the West. Both factors will add to the sense of injustice that underlies most terrorism.

3. HAVES AND HAVE-NOTS: This future emphasizes the growth of international trading blocs and assumes that--contrary to their stated intentions--the blocs will replace at least some of their internal trade barriers with restrictions aimed at competition from outside. The growth of multinational corporations mitigates this trend only slightly. At the same time, new technologies provide new arenas for competition. And again, the increasingly populous Third World is left behind.

Economic tensions arise between states that have been political allies for nearly half a century. The bilateral world of Cold War politics is replaced by a polycentric balance of power, largely driven by market forces and economic convenience. International power grows from the ability to dominate trade blocs, rather than from regional military superiority. A unified European Community and an American bloc that closely resembles NAFTA each struggle to preserve economic stability, while Asia experiences recession and political-military conflicts. Among the smaller nations, wars are fought to secure trade rights and to discourage protectionism. Among the developed lands, such frictions are managed nonviolently, but remain potent.

Due to the rise of xenophobic nationalism throughout the world, the United States has lost much of its international influence, closed most of its overseas military bases, and brought its troops home. This reduces American exposure to foreign terrorism, but at the same time makes it difficult to influence tensions that directly affect our interests.

4. HUMPTY DUMPTY: Our fourth scenario was developed, of course, before the rise of Russia's Vladimir Zhirinovsky, but it mirrors the conflicts that have brought him to prominence. It is the world that so frightens many of his supporters.

The international order is in a state of anarchy, as peoples seek to redefine themselves along ethnic, religious, and cultural lines, rather than as national groups. The Soviet Union fragments into ever-smaller states driven by ethnic and cultural hatreds, some armed with nuclear weapons. China collapses into feuding provinces. Some 400, and perhaps as many as 500, "states" compete in the decentralized international system, with little supranational authority to moderate their interactions. Japan's growing assertiveness antagonizes its neighbors, who remember all too well how they were victimized during World War II. In this world, there are few reliable guideposts for American policy and action, but a conflict could emerge at any moment, almost anywhere on Earth.

5. ECONOMICS DOMINATES: This is another possible outcome of the growing integration of the global economy. In this scenario, we assumed that trade barriers would not rise again. Instead, the major frictions would come from outside the dominant world community. The current debate over what to do about North Korea offers a prototype for the conflicts of this future and may say a good deal about how--or whether--they would be resolved.

Nation-states lose their central role in the world and for many practical purposes are replaced by economic blocs and multinational corporations. In this world of broad cooperation among industrial regions, international competition is keenest between the developed and the developing lands.

International affairs are governed largely by the United Nations, which enforces laws and conventions, including its bans on arms sales and the spread of weapons of mass destruction. America's international role accordingly has dimin-

ished. The U.S. military, probably somewhat smaller than it is today, largely acts to protect the international economy and to promote economic development. Military threats derive, not from the major powers, but from the maverick states and terrorists of the developing world. The Middle East, in particular, remains a flashpoint.

6. FLASH GORDON: This future is a world of scientific advances. Medical care is getting better almost daily. Prices are dropping for consumer goods that can be produced by automated factories. Global trade is rapidly expanding, bringing new prosperity to the developed lands. Key trends include 10, 11, 16, 17, and 18 in Appendix C; and 3 through 5, 16 through 20, and 21 and 22 in Appendix D--the aspects of life and society most dependent on research.

New technologies such as genetic engineering and computer information networks enrich those who can use them, but widen the gap between the "haves" and "have-nots." In the industrial lands, a small, educated, wealthy class of technologists is supported by a much larger group of service workers, who enjoy few advantages. Developing lands find it increasingly difficult to compete with advanced industrial societies, and some try to take by force or extortion the riches they cannot win in the marketplace.

Free-market philosophy extends to social functions, which increasingly are privatized. In the United States and most other industrialized lands, this creates a Darwinian struggle between the advantaged and disadvantaged.

Yet the intellectual basis of society is shifting from the old mechanical paradigm of control to one of mutual adaptation based on living models. Hopes are high that humanity will soon eliminate social and environmental ills.

7. GREENWORLD: Environmental concerns dominate this scenario, which is derived largely from Trends 14 and 15. The most important threats are of our own making--water shortages, pollution, and global warming; the continuing epidemic

of AIDS in Africa; the increasing cost of protecting Middle Eastern oil; and the rapid extinction of species. The cost of extracting resources and disposing of waste is soaring. Landfills are glutted, and even the ocean has become too small to accept our trash. By comparison, political and military dangers seem small.

In response, the United States settles down to manage what are seen as the limited resources of our planet. Military assets are redirected to attack environmental problems, while the government encourages decentralization of food and energy supplies.

All Americans serve two years in the newly created National Service Corps, with the mission of protecting the global ecosystem. Nongovernmental organizations that monitor the environment both proliferate and gain influence.

8. BIG BROTHER: How would the world look if communications reshaped the developed countries in its own hyped image? Trends 21 and 22 in Appendix D set the ground rules for this scenario.

Big Brother rules this future. In a media-dominated world, entertainment increasingly substitutes for reality. Troubles face us on all fronts: Global warming and uncontrolled pollution threaten the planetary ecosystem. Crime is rampant. Children are neglected. The United States faces crushing debt. War threatens small countries, while terrorism strikes almost universally. Yet the media are manipulated so as to create the impression of universal affluence.

The military no longer deals primarily with outside threats. Instead, its mission is internal security, maintaining stability largely through high-tech information warfare. As a result, the public perceives it as a police force.

9. SUM OF ALL HOPES: One of the most optimistic futures is derived from Trends 49 and 50 of Appendix D, which emphasize the growing role of international organizations. This is the antithesis of the Humpty Dumpty scenario.

At last, peace and stability reign in a world organized around economic integration, trade, and international cooperation. The nationstate has atrophied, many of its functions taken over by supranational bodies. The real competition is no longer military, but economic.

As a consequence of this growing interdependence, and the potential cost of war, military force has become largely a symbolic deterrent. A strong body of international law and effective arms-control treaties help to manage any threat of crisis or conflict. These are supplemented by an international military force, its members borrowed from national armies, the peacekeepers we know today.

10. BROTHERHOOD: Finally, we considered a philosophical revolution. Again, this future is descended from a variety of trends. Technology, the environment, and the growth of international organizations all contribute to it. So does the rise of diversity as an explicit value in Western culture, Appendix C, Trend 48.

In this future, nations grow more interdependent. Technology offers new wonders daily, but in the process undermines familiar jobs and lifestyles. Traditional authority structures crumble under the stress of change.

From this ferment, a new ideology emerges. Its chief tenets include: the overwhelming need to manage disagreements and avoid armed conflict, restrictions on the traditional sovereignty of nation-states, a new stress on cooperation, and a determination to harness technological development to an ethical framework that advances the human condition.

In this future, nation-states surrender much of their authority, and regional associations like the European Community become the basic unit of the international system. The dominant nations, like the United States in North America, work to integrate their regions, rather than asserting individual power. At the same time, the regions submit themselves to a growing, authoritative body of international law and

common values. Global acceptance of human-rights standards at last prevents governments from repressing their citizens.

National armies lose their role in this new world and slim down, largely to save money. Regional associations or the U.N. decide the use of military power, not individual governments. They apply it selectively, not only because the high-tech weapons are so lethal, but because war might well damage the interdependent systems on which they depend. The nuclear terror that dominated much of the late 20th century is a clear memory, but it is receding quickly.

Appendix D

74 Major North American Trends

74 Trends That Will Affect America's Future--And Yours

Forecaster Marvin Cetron, author of numerous books about the future, recently prepared a new report listing 74 trends and forecasts affecting the United States. Based on these trends, he anticipates a "renaissance" for America in the years ahead. Though he views himself as realist, Cetron says that his findings make him very optimistic about the future.

Together, these trends provide a comprehensive overview of changes that will shape America as the nation approaches the start of the twenty-first century. Much of the report is startling or controversial, but all of it is based on the kind of research and analysis that have made Cetron a valued consultant to American presidents of both parties, from John Kennedy through Bill Clinton.

Note: The editors of THE FUTURIST magazine collaborated with Cetron in preparing this version of his list of trends.

General Long-Term Societal Trends

1. Economic prosperity--affluence, low interest rates, low inflation rate--will continue through the foreseeable future.

- There may be minor recessions during the 1990s, but they will only be perturbations. Our long-range forecast for the economy is good: Through the year 2000, the U.S. economy should be the best in the world.

- Per capita personal income increased 1.5% annually between 1980 and 1991. It will average 1.8% annually through the turn of the century.
- Part of society's affluence rests on the use or overuse of credit cards. Extension of excessive credit could result in government-imposed limitations, especially on credit rates.
- The intolerably high interest rates of the 1970s have led the Federal Reserve Board (FRB) to "manage" interest rates since 1981. As a result, interest rates are now the lowest in 20 years. They will remain low through the 1990s.
- FRB monetary policies instituted by chairman Paul Volker and continued by his successor, Alan Greenspan, will keep interest and inflation rates in check. Housing starts will continue to grow and building and construction will increase.
- As the dollar declines against other currencies, American exports will grow rapidly. This will finally begin to correct the U.S. balance-of-trade deficit.

2. The growth of the information industries is creating an extremely knowledge-dependent society.

- Service workers will make up 88% of the U.S. labor force by 2000. Half of them (44%) will be involved in collecting, analyzing, synthesizing, structuring, storing, or retrieving information.
- Half of these service workers (22%) will opt for flextime, flexplace, and work-at-home arrangements, communicating with the office via computer terminals.

- The computer industry will continue to offer vast opportunities for creative entrepreneurs. Though hardware remains promising, software developers will reap the greatest rewards.
- Expert systems will issue reports and recommend actions based on data gathered electronically, without human intervention.
- Investment in expert systems and related technologies grew from \$35 million in 1986 to \$900 million in 1991. The pace will accelerate throughout the 1990s.
- Industries that will benefit from expert systems include insurance, investments and banking, manufacturing and process control, equipment diagnosis, and quality control.

3. The very poor and very wealthy will decline in American society.

- The very rich will still own a disproportionately large fraction of the nation's wealth; yet they will make up a smaller percentage of the population.
- The number of households with annual incomes over \$75,000 (in 1990 dollars) grew from 5.6% in 1970 to 9.7% in 1990; those with income under \$10,000 declined from 15.6% in 1970 to 14.9% in 1990. Both these trends will continue.
- Statistics overstate the number of very poor in the United States, because they omit income-equivalents such as food stamps, housing allowances, and free medical care. When these are included, the poverty rate falls sharply. Official figures show that 10.5% have incomes under \$10,000 per year, but the effective number is closer to 6%--7%.

- Higher taxes for people whose income is over \$180,000 per family will tend to slow the growth of the very wealthy in U.S. society.
- Most importantly, small businesses structured as proprietorships or partnerships or as Subchapter S corporations will be taxed at the same rate as individuals. This will reduce job growth among small businesses.
- To offset that, and restore job growth, the tax on capital gains will eventually be reduced.
- The Social Security system will be reformed. Those reforms will include means testing and taxation of benefits.

4. Rural land is being colonized by suburbs and cities.

- Land in farms has decreased steadily since 1959. The rate of decline was 1% per year from 1975 to 1985 and slowed to 0.5% per year between 1985 and 1991.
- Suburbs are developing more rapidly than cities, largely because land there is cheaper and road systems provide easy access. Three-fourths of the U.S. population lives in cities and their suburbs, only one-fourth in rural areas.
- Suburbia is being urbanized, as satellite cities grow outside the major metropolitan areas. Construction of office parks, shopping centers, and entertainment districts is creating suburban "downtowns."
- And population is expanding from the suburbs into outlying towns and rural areas.

- "Superburbs" will increasingly connect cities, especially in the South and West, where most of the population growth over the next decade is expected to occur.

5. The middle-class society will prevail.

- The middle 60% of families have received 52% -- 54% of income since 1950. This proportion will grow slightly in the next five years.

6. Growing acceptance of cultural diversity will promote the growth of a truly integrated national society.

- Our beliefs and values are shaped by what we see and hear. Throughout the United States, people see the same movies and TV programs.
- Schools across the country teach essentially the same things.
- New modes of transportation, better roads (especially the interstate-highway system) and accommodations, more leisure time, and greater affluence will allow more-frequent travel. (Common-carrier passenger miles grew by 4% per year from 1982 to 1985 and by 3.7% from 1985 to 1990.) This will produce a greater sharing of ideas, information, and concerns.
- Intermarriages continue to mix cultures geographically, ethnically, socially and economically.
- Information technologies are promoting long-distance communication as people hook up with the same commercial databases and computer networks. Two-way cable television will accelerate this process.
- Regional differences, attitudes, incomes, and lifestyles are blurring as people move from one region to another.

- Minorities will exert more influence over the national agenda as the population of African Americans, Latinos, and Asian Americans increases from 17% in 1990 to 33% by 2000.

7. The permanent military establishment will continue to shrink.

- More and better-trained reserves and National Guard units will reduce the need for permanent, professional troops.
- Smart weapons will tend to reduce military personnel requirements.
- Orders for new and replacement weapons are being cut back.
- The military is combining and eliminating bases.
- By 2000, young men and women will probably spend two years in compulsory national service. They will have three options: military service; VISTA-type work with poor and disabled; or duty with the Peace Corps.

8. Americans grow increasingly mobile in key areas: personal life, location, occupations, jobs.

- About 17% of the population move each year.
- Modular housing, made largely of plastic, will allow people to move more frequently and easily. They will simply pack up their houses and ship them to the new locale.
- Job mobility--changing location or firms, but doing the same work--will increase. People soon will expect to change jobs four to five times during their lifetimes.
- Dual-career families, with partners sometimes working in different cities, require greater personal mobility.

- Global satellite communication will be available by 1997. A person equipped with a mini-transceiver will be able to speak to anyone, send a fax, or even tie into computers, anywhere in the world, 24 hours a day.
- The new information-based model for the organization--a nonhierarchical, organic system able to respond quickly to environmental changes--fosters greater occupational flexibility and autonomy.

9. International affairs and national security are becoming major factors within U.S. society.

- More international travel for business and pleasure brings greater exposure to other societies--and to foreign political turmoil.
- International student-exchange programs are proliferating.
- Observation/verification activity between the East and West has grown since the end of the Cold War.
- East-West television and radio satellite hookups will increase.
- Regional political and economic arrangements such as the European Community, the Organization of American States, and the North American Free Trade Agreement will play a larger role in world political and economic affairs.
- The international treaty signed at Rio in 1992 was only the first step toward environmental cooperation on a global scale.
- The West and the United States are pumping large amounts of money into the former East-Bloc countries to aid their economies in the transition from communism and socialism to democracy.

Technology Trends

10. Technology increasingly will dominate both the economy and society.

- Personal robots will appear in the home by 2000. Robots will also work at mundane commercial and service jobs, environmentally dangerous jobs, and assembly and repair of space station components in orbit.
- Computers will become part of our environment, rather than just tools we use for specific tasks. Portable computers will give us wireless access to networked data wherever we go.
- Wireless hookups will simplify relocation of personnel, minimize delays in accomplishing new installations, and let terminals travel with the user instead of forcing the user to seek out a terminal.
- By 2001, artificial intelligence and virtual reality will help most companies and government agencies to assimilate data and solve problems beyond the range of today's computers. AI's uses include robotics, machine vision, voice recognition, speech synthesis, electronic data processing, health and human services, administration, and airline pilot assistance.
- By 2001, expert systems will permeate manufacturing, energy prospecting, automotive diagnostics, medicine, insurance underwriting, and law enforcement.
- Superconductors operating at room temperature will be in commercial use by 2001. Products will include supercomputers the size of three-pound coffee cans, electric motors 75% smaller and lighter than those of today, practical hydrogen-fusion power plants, electrical storage facilities with no heat loss, analyzers that can chart the interaction of brain cells, and 200-mph maglev trains that float on magnetic cushions.

11. Technological advances in transportation will dispel the specter of national gridlock in the air and on land.

- Rails are on the way out, but trains are not. Late in this decade, high-speed trains will begin to replace the spokes of the airline industry's existing hub-and-spoke system for journeys of 100 to 150 miles.
- Planes will carry 1,000 passengers. New York, Tokyo, and Frankfurt will become common transfer points for passengers of high speed supersonic planes.
- The average life of a car in the United States will be 22 years in the year 2000. (For a Volvo, it is already 19 years.)
- Advances in automobile technology will give us the smart car, equipped with sensors, antilock brakes, computer-orchestrated fuel-injection systems, continuously variable transmission, active suspension, and many other innovations.
- The government will lag in adopting new highway technology. A White House initiative, "Car Wars," in 2000, will usher in systems that allow traffic lights and the roadbed itself to interact with cars.
- Airline crashes will decline, and will involve fewer fatalities, by 2000, thanks to the use of satellites for both navigation and communication in transoceanic flights, safer seat design, and fire-resistant fuels.

12. The U.S. economy is growing more integrated.

- New industrial standards--for building materials, fasteners, even factory machinery--allow both civilian and government buyers to order from any supplier, rather than only from those with whom they have established

relationships. The acceptance of global standards is one of the most important industrial trends now operating.

- To aid "just-in-time" purchasing, many suppliers are giving customers direct, on-line access to their computerized ordering and inventory systems. The order may go directly from the customer to the shop floor, and even into the supplier's automated production equipment. Many manufacturers will no longer deal with suppliers who cannot provide this access.
- Computer networks and cable-TV home-shopping channels are bringing retailers and manufacturers closer to distant customers, who have been out of reach until now.

13. The U.S. economy is becoming integrated with the international economy.

- Imports continue to increase, international capital markets are merging, and buying patterns around the world coalesce. All these factors promote the interdependence of business and government decisions worldwide.
- Nationalistic self-interest will continue to yield to international trade cooperation. Both developing and developed countries will focus less on dominating economic competitors and, instead, will put efforts into liberalizing trade cooperation.

14. The international economy will gain importance throughout the 1990s.

- Consumers around the world are demanding higher quality in products and services.
- Tariffs and other trade barriers are falling around the world.

- Privatization is a growing trend, with governments around the world selling off public services. In the United States, this could mean an end to the U.S. Postal Service's monopoly on regular mail service.
- Globally, this means a transition from governmental to private ownership of airlines, railroads, water, and electricity.

15. Research and development (R&D) will play a growing role in the economy.

- R&D outlays as a percentage of GNP rose steadily in the decade after 1978, then stabilized in 1988. The increase in R&D outlays will likely resume as the effects of the recent recession are left behind.
- R&D outlays are growing most rapidly in the electronics, aerospace, pharmaceuticals, and chemical industries.

16. Technology is turning over faster every year.

- The design and marketing cycle--idea, invention, innovation, imitation--is shrinking steadily. Successful products must be marketed quickly, before the competition can copy them.
- Computer-aided design in the automobile and other industries shortens the delay between idea and finished design.
- All the technological knowledge we work with today will represent only 1% of the knowledge that will be available in 2050.

17. Mass telecommunications and printing are continuing to unite the nations of the world.

- Telecommunications removes geographic barriers. In the Caribbean and other low-wage regions, it costs only 50¢ per hour to have two people type data into a computer and reconcile their mistakes. The total cost, including

two-way satellite transmission to the United States, is less than \$1.50. In the United States, it costs \$5 per hour to have one person enter data.

- The "integrated information appliance" will combine a computer, a fax, a picture phone, and a duplicator in one unit for less than \$2,500 by the year 2000. The picture will appear on a flat screen of 20 inches by 30 inches.
- Both The Wall Street Journal and USA Today, relying on satellite communications, are printed simultaneously at multiple sites every day.
- Company-owned and industry-wide television networks are bringing programming to thousands of locations. Business TV is becoming big business.
- Today, 60% of households with televisions have cable TV. The proportion will reach 87% by 2000.
- Magazines in the year 2001 will be published on disks that allow the reader to interact, play with, and manipulate the information on a PC.
- Mass media will be increasingly personalized as more consumers use pay-per-view television to select movies and entertainment.
- Computer systems will create personalized newspapers by logging onto news-service databases at night, selecting stories and pictures, laying them out, and setting the headlines in sizes that reflect their importance to the reader.

18. Major medical advances will continue to appear almost daily. (See also Trends 51 and 52.)

- Genetic engineering will do \$100 billion worth of business by 2000. Artificial blood will be on the market by 2000; it could eventually replace

blood banks. Memory-enhancing drugs should arrive in the 1990s. New-born babies will be artificially endowed with particular disease immunities.

- The ethical issues raised by technologies such as organ transplants, artificial organs, genetic engineering, and DNA mapping will cause a growing public debate. Among the key problems: surrogate motherhood, when to terminate extraordinary life-support efforts, and whether fetal tissues should be transplanted into adults in order to combat disease.
- "Bloodless surgery" using advanced lasers will reduce patient trauma, shorten hospital stays, and help lower medical costs.
- Brain cell and tissue transplants will enter clinical trials by 2001 to aid victims of mental retardation and head trauma. Transplanted animal organs will find their way into common use until doctors begin to grow new organs from the patient's own tissue, around 2015. Laboratory-grown bone, muscle, and blood cells also will be used in transplants.

Educational Trends

19. Demand for lifelong education and training services will heat up throughout society.

- The half-life of an engineer's knowledge today is only five years; in 10 years, 90% of what engineers know will be accessible by computer.
- Eighty-five percent of the information in National Institutes of Health computers is upgraded every five years.
- Fundamental changes in the economy are destroying the few remaining well-paying jobs that do not require advanced training.

- In the next 10 years, close to 6 million jobs will open up for professionals, executives, and technicians in the highly skilled service occupations. This especially applies to health care.
- Up to 4% of the labor force will be in job retraining programs at any moment in the 1990s.
- Schools will train both children and adults around the clock: The academic day will stretch to seven hours for children; adults will work a 32-hour week and prepare for their next job in the remaining time.
- State, local, and private agencies will play a greater role in training by offering more internships, apprenticeships, pre-employment training, and adult education.

20. New technologies will greatly improve education and training.

- Job-simulation stations--modules that combine computers, videodiscs, and instrumentation to duplicate work environments--will be used in training.
- Telecommunications course work will open up new vistas in education.
- Education will become more individualized, as interactive computer/videodisc systems and other new media permit students to learn according to their specific needs and abilities.
- Personal computers with ultra-high resolution screens, 3-D graphics, high-level interactivity, artificial intelligence, and virtual reality will enhance gaming and simulations used in education and training.

21. Business is taking on a greater role in training and education.

- More businesses will form partnerships with schools and offer job-training programs.
- Most new jobs are generated by small businesses, which cannot afford to pay for training. Half of all funding for formal training comes from the 200 to 300 largest companies in business and industry.

22. Education costs will continue to rise.

- Communities will put heavy pressure on school systems to control costs.
- Costs may reach the point where they threaten to reduce the pool of college graduates over the next decade.
- Two-year colleges and associate degrees will gain popularity, because they are more affordable than four-year programs.
- Five-year co-op college programs also will increase dramatically in the rest of the decade.
- Loans rather than grants will provide most student financial aid.

23. School districts throughout the United States are reinventing the educational system.

- Lackluster performance of American students on standardized tests will prompt reforms.
- Policy changes designed to improve students' performance in the U.S. school system may include lengthening the school year to 210 seven-hour days and cutting class size from an average of about 18 students to 10.

24. Educational institutions will pay more attention to the outcomes and effectiveness of their programs.

- The public and state legislatures will increasingly demand an assessment of student achievements and hold schools accountable.
- Faculty will support (reluctantly) efforts to assess their classroom performance and effectiveness.
- Academic departments will also support evaluation of their academic programs' results and effectiveness.
- More states will adopt the national education goals to assess their schools' performance.

25. Improved pedagogy--the science of learning--will revolutionize education.

- Individuals will learn more on their own, so the "places" of learning will be more dispersed, and the age at which things are learned will depend on individual ability, not tradition.
- Computer-supported approaches to learning will improve educational techniques and make it possible to learn more in a given period.
- The ultimate consequence may be a one-sixth reduction in learning time overall.

26. Universities will stress development of the whole student. They will redesign the total university environment to promote that development.

- Individual students will receive more support from faculty and advisers in deciding about academic programs and career paths.
- By 2001, nearly all college textbooks will come with computer disks to aid in learning.
- Computers will provide access to the card catalogs of all the libraries in the world by the late 1990s. It will be possible to call up on a PC screen

millions of volumes from distant libraries. Videodiscs will enhance books by providing visual and audio information. In the long run, even smells, feels, and tastes may be recorded and reproduced.

- Many encyclopedic works, large reference volumes, and heavily illustrated manuals will soon be cheaper to produce and sell through electronic packaging. Videodiscs will fill this need.

27. Institutions of higher education are shrinking.

- By 2001 there will not be enough adolescents to sustain the current number of colleges and universities. Colleges will close their doors, merge with other schools in a federation, reduce faculty size and class offerings, and seek more adult students.
- Private commercial ventures will establish themselves as the proprietors of large electronic databases, eventually replacing the university library.
- Students will adopt the scholar's mode of learning--learning by consulting books, journals, and primary resources--as professors and Ph.D. candidates do today.

Trends in Labor Force and Work

28. Specialization is spreading throughout industry and the professions.

- For doctors, lawyers, engineers, and other professionals, the body of knowledge required for mastery of a particular area of practice precludes excellence in all areas.
- The same principle applies to artisans. Witness the rise of post-and-beam home builders, old-house restorers, automobile electronics technicians, and mechanics trained to work on only one brand of car.

- Globalization of the economy calls for more independent specialists. For hundreds of tasks, corporations will turn to teams of consultants and independent contractors who specialize more and more narrowly as markets globalize and technologies differentiate. (See Trends 44 and 45.)

29. Services are the fastest-growing sector of the American economy.

- The service sector employed 70% of the U.S. labor force in 1990 and will grow to 73% by 2005.
- Service jobs have replaced many of the well-paid jobs lost in manufacturing, transportation, and agriculture. These new jobs, often part time, pay half the wages of manufacturing jobs.

30. The agricultural and manufacturing sectors will continue to shrink.

- Agriculture and mining employ 0.4% less of the American labor force each year.
- There will be 1.25 million farmers in the United States in 2000; this is 900,000 fewer than in 1990.
- By 2001, manufacturing will employ less than 10% of the labor force, down from 18% in 1987. However, productivity will rise 500% in industries that become more automated, add robots, and remain flexible in their production.
- With the evolution of new materials and production technology--CAD, CAM, robotics, and semiconductors--the few remaining unskilled and semiskilled jobs in manufacturing will disappear.

31. The information industries are growing rapidly, creating an information society in the process. (This is an outgrowth of Trend 2.)

- Information is the primary commodity in more and more industries today.
- Seventy percent of U.S. homes will have computers in 2001, compared with 30% now. More than three-fourths will be equipped to permit communication with computers elsewhere.
- The amount of information accessible through home computers (from telephone links and from extremely high-capacity disks) will be so vast that we will require artificially intelligent electronic assistants to sort through it.
- Personal computers will be used to vote, file income tax returns, apply for auto license plates, and take college entrance exams and professional accreditation tests.

32. More women will continue to enter the labor force.

- In 1970, only 43% of women worked. By 1990 the figure had grown to 57.5%. By 2000, 62% of women will be in the labor force; by 2005, 63%.
- Businesses will seek to fill labor shortages with stay-at-home mothers offering child-care programs and job sharing.
- More flextime and flexplace opportunities will make it easier for women to enter the work force.

33. Women's salaries will slowly approach men's.

- Women's salaries have grown from 61% of men's in 1960 to 74% in 1991. The figure will be 83% or more by the year 2000.

34. More African Americans and other minority groups are entering the labor force.

- African-American workers made up only 9.2% of the civilian labor force in 1970. By 1990, they had grown to 13.5% of the labor force. The figures will be 16.5% in 2000 and nearly 18% in 2005.
- Hispanic workers formed 6% of the civilian labor force in 1980 and 10% in 1991. By 2000, they will make up 14% of the labor force; by 2005, 17%.
- One out of six workers belonged to an ethnic minority in 1990. By 2000, they will be one out of three.

35. Workers are retiring later.

- As life expectancy increases (see Trend 62) the standard retirement age will climb to 70 by the year 2000. Social Security may even delay eligibility for benefits. Workers can now retire as young as 62.

36. Unions will continue to lose power.

- Unions enrolled 29% of employed wage and salary workers in 1975, but only 23% in 1980. By 1985, union membership had declined to only 18%. Union members are expected to drop to 11% by 1995 and to less than 10% by 2000, according to the United Auto Workers.
- One reason for the decline is that jobs are moving constantly to no-union states or right-to-work states.

37. Pensions and pension funds continue to grow.

- Private pension and government retirement funds held only 4% of total institutional assets in 1970. By 1991, they held 6.5% of institutional funds.
- There will be more people in the labor force for longer periods, adding to pension-fund holdings.

38. Second and third careers are becoming common, as more people make mid-life changes in occupation.

- People change careers every 10 years, on average.
- A recent Louis Harris poll found that only 39% of workers say they intend to hold the same job five years from now.

39. The work ethic is vanishing from American society.

- Tardiness is increasing. Sick-leave abuse is common.
- Job security and high pay are not the motivators they once were.
- Sixty percent of college business students said they would be willing to spend three years in jail and have a jail record in return for \$5 million, according to a 1993 survey.
- In a 1992 poll of the under-30 population, 38% said that being corrupt was "essential" in getting ahead.

40. Two-income couples are becoming the norm.

- They made up 38% of all married couples in 1980, and 47% in 1991. The figure will reach 75% by 2000.

41. Entry-level and low-wage-rate workers will soon be in short supply.

- The declining birthrate in the 1960s and early 1970s means that fewer young people are entering the job market today. The number of jobs is increasing, creating entry-level labor shortages. This problem will grow in the late 1990s, especially in the service sector.
- This may produce more entry-level job opportunities for high-school graduates, as companies become more willing to train workers on the job.

- Untapped pools of potential workers include the retarded and handicapped and stay-at-home mothers. Businesses will also increase automation and seek to attract more foreign workers.

Management Trends

42. More entrepreneurs start new businesses every year.

- The number of self-employed people in the U.S. increased from 7.5% in 1975 to nearly 9% in 1991.
- The number of new business incorporations has soared from under 100,000 in 1950 to a record 702,000 in 1986. Start-ups declined in 1988 but are expected to break records again as the economy improves during the 1990s.
- More mid-career professionals will become entrepreneurs as they are squeezed out of the narrowing managerial pyramid in large companies. By 2001, only one person for every 50 will be promoted; in 1987, it was one person for every 20 (See Trend 46.)
- More women are starting small businesses. Many are leaving traditional jobs to go home, open businesses, and have children.
- During the decade from 1970 to 1980, small businesses started by entrepreneurs accounted for most of the 20 million new jobs created.
- By 2000, 85% of the U.S. labor force will be working for firms employing fewer than 200 people.

43. Information-based organizations are quickly displacing the old command-and-control model of management. Information technology is the driving force.

- Manual and clerical workers are increasingly outnumbered by knowledge workers.
- Expect managers to rely increasingly on consultants rather than full-time workers.

44. Work will increasingly be done by task-focused teams of specialists.

- The traditional department will assign the specialists, set the standards, and serve as the center for training.
- Research, development, manufacturing, and marketing specialists will work together as a team on all stages of product development rather than keeping each stage separate and distinct.

45. The typical large business will be information-based, composed of specialists who rely on information from colleagues, customers, and headquarters to guide their actions.

- Decision processes, management structure, and modes of work are being transformed as businesses take the first steps from using unprocessed data to using data that have been converted into information that is analyzed, synthesized, and organized in a useful way.

46. A typical large business in 2010 will have fewer than half the management levels of its counterpart today and about one-third the number of managers.

- Middle management will all but disappear as information flows directly up to higher management for analysis.
- Downsizing, restructuring, reorganizations, and cutbacks of white-collar workers will continue until the late 1990s.

- Computers and information-management systems have stretched the manager's effective span of control from six to 21 employees; thus, fewer mid-level managers are needed.
- With major firms "trimming the fat," the management pyramid will be flattened, with the specialists on the bottom.

Trends in Values and Concerns

47. Societal values are changing rapidly.

- The "me" ethic of the 1980s has already been replaced by the "we" ethic, and a new "family" ethic has begun to appear.
- Family issues will dominate the 1990s: long-term health care, day care, early childhood education, anti-drug campaigns, and drug-free environments.
- Companies are now required to grant "family leave" for parents of newborns or newly adopted children and for caretakers of elderly or ill family members.
- Promiscuity used to be inhibited by fears of "conception, infection, detection;" infection--especially by herpes and AIDS--still stands, but the others have fallen.
- Conspicuous consumption is passé it has been replaced by down-scaling.
- Middle age will be "in" by 2000; the "youth culture" will be "out."

48. Diversity is become a growing, explicit value.

- The old idea was to conform, blend in with the group. This is giving way, especially among minorities, to pride in cultural heritage and a general

acceptance of differences in all aspects of society. One example is the tolerance, still contested but growing, for atypical sexual preferences.

- The United States is not a melting pot, but a mosaic. People have different roots, and increasingly they cling to them.

49. Americans place growing importance on economic success, which they have come to expect.

- The emphasis on economic success will remain powerful. However, the means to achieve aspirations may not be there. Only one in three high-school graduates goes on to receive a college degree, and without higher education, expectations may never be met.
- More young people report earning no money at all.

50. Tourism, vacationing, and travel (especially international) will grow throughout the 1990s. (See Trend 60.)

- People have more disposable income today, especially in two-earner families.
- The number of U.S. citizens visiting foreign countries (excluding Canada and Mexico) increased at nearly 5% per year from 1981 to 1990.
- By 2001, air travel for both business and pleasure will reach twice the 1985 rate.
- By 2000, one of every 10 people in the United States will work for the hospitality industry.
- Multiple, shorter vacations spread throughout the year will continue to replace the traditional two-week vacation.

51. A high level of medical care is increasingly taken for granted.

- Medical knowledge is doubling every eight years.
- There will be a surplus of 100,000 physicians by 2001, even if the health-care reform brings new patients into the medical system. The result: doctors will pay closer attention to individual patient care and extend their office hours to evenings and weekends.

52. The physical-fitness culture and personal-health movements will remain strong.

- Emphasis on preventive medicine is growing. By 2001, some 90% of insurance carriers will expand coverage or reduce premiums for policyholders with healthy lifestyles.
- Personal wellness, prevention, and self-help will be the watchwords for a more health-conscious population. Interest in participant sports, exercise equipment, home gyms, and employee fitness programs will create mini-boom industries.
- Consumer purchases show a per-capita decline in annual liquor consumption, from 43 gallons in 1980 to 40 gallons in 1990.
- Smoking is also in general decline. In 1993, 31% of men smoke, down from a peak of 50%; 25% of women smoke, down from 32%.

53. Americans increasingly expect a high level of social service.

- More services and accommodations have catered to the deaf, blind, disabled, poor, infirm, and aged since the 1992 disability act was signed.
- By the year 2000, every taxpayer will be paying \$500 a year to care for AIDS patients.
- More psychiatric help will become available for alcohol and drug abuse.

54. Concern for environmental issues is growing.

- Zoos will serve as "Noah's Archives," collecting not only species, but genetic materials in an effort to slow the increasing extinction rate of animals.
- Warming of the earth's atmosphere caused by the greenhouse effect will result in a worldwide rise in sea levels; national governments will implement policies to reduce use of fuels producing carbon dioxide, develop more-efficient energy technologies, and combat deforestation.
- Fusion reactors producing "clean" nuclear energy will appear after 2010; by 2030 they will be a major source of power.
- Ocean-wave power plants will produce both electricity and fresh water for island communities. More islands will be inhabited as a result.

55. Consumerism is still growing rapidly.

- Better information--unit pricing, better content labels, warning labels, and the like--will proliferate via packaging, TV, and special studies and reports.
- With a wealth of information, consumers will become smarter buyers.
- Discount stores such as factory outlets and food clubs will continue to grow.

56. The women's equality movement will become less strident, but more effective.

- "Old girl" networks will become increasingly effective as women fill more positions in middle and upper management.

- An infrastructure is evolving that allows women to make more decisions and to exercise political power, especially where both spouses work. The effects will include more child-care services, greater employment opportunities, and rapidly closing pay gaps between men and women.

Family Trends

57. Birth rates are declining.

- The birth rate per 1,000 population has declined from 24% in 1950 to less than 17% in 1990.
- Families are getting smaller. In 1991, the average number of people living in a U.S. household was 2.63, down from 3.67 in 1940.

58. Rates of marriage and family formation are rising.

- This reverses a long-term trend. The U.S. marriage rate per 1,000 unmarried women 15-44 years old plummeted steadily from 140.2 in 1970 to only 99.0 in 1984. Now, fear of AIDS is reversing the trend. (See Trend 59.)
- There will be a surplus of eligible men and a shortage of eligible women in their 20s. The ratio of men to women in this age group in 1973 was 93-to-100. By 1990, it had reversed to 108-to-100. In 2000, it will be 103-to-100.

59. The divorce rate is declining.

- The long rise in divorce rates has already broken. The rate per 1,000 married women age 15 and over rose to a peak of 22.6 in 1980. By 1988, it had declined to 20.7.

- Fear of AIDS may cause a further decline. The real impact of AIDS will be seen in more stable marriages.

60. Americans will regain their leisure time in the 1990s, and then some.

- Computerized manufacturing will result in a shorter average workweek, starting in major corporations.
- Sweden's workweek is now 36 hours; Germany's is 37 hours, headed for 35. As more people enter the labor force, the workweek will drop to 32 hours, leaving more time for recreation and study.
- Entrepreneurs will be the exception. Their workweek is now over 50 hours and rising.

61. The do-it-yourself movement will continue to grow.

- There will be more leisure time available to spend on do-it-yourself projects.
- Availability of more low-price professional tools and supplies for the do-it-yourself market will spur the movement.
- More videotapes and books are also available for do-it-yourselfers.

62. The nutrition and wellness movements will spread, raising life expectancy.

- Since the turn of the century, every generation has lived three years longer than the last. In this generation, better diet, exercise, and the new emphasis in prevention will extend that to five years.
- By 2005, look for a breakthrough in aging research to provide 115 to 120 years of vigorous good health.

63. Children are becoming increasingly isolated from adults and their problems.

- Two-income couples are seldom available to discuss adult problems in the children's hearing.
- More children are being placed in day-care centers and preschools.

64. Adolescence is stretching into early adulthood.

- The median age at first marriage among men has moved from 22.5 in 1970 to 25.8 in 1988.
- Women have delayed their first marriage from a median age of 20.6 in 1970 to 23.7 in 1988.

65. Single heads of households are increasingly common. They are the new poor.

- Fewer than 11% of all households were headed by a single person in 1960. The percentage had climbed to 15% by 1991.

66. America's already large aged population is growing rapidly.

- Persons age 65 and older made up only 9% of the American population in 1970. By 1991, they were 12.6%.

67. Family structures are becoming more diverse.

- In periods of economic difficulty, children and grandchildren move back in with parents and grandparents to save on living expenses.
- Growing numbers of grandparents are raising their grandchildren, partly because drugs and AIDS have left the middle generation either unable or unavailable to care for their children.
- Among the poor, grandparents are also providing live-in daycare for the children of single mothers trying to gain an education or build a career.

- Yet, the nuclear family is also rebounding, as baby-boom parents adopt "family values" and grandparents retain more independence and mobility.

Institutional Trends

68. As the federal government shrinks, state and local governments are growing.

- Full-time federal civilian employment declined from 19% of the total American employment in 1975 to 17% in 1990.
- In contrast, state and local governments employ more of the work force. In 1975, they provided 80% of full-time civilian government jobs. By 1990, their share was up to 83%.

69. Multinational corporations are uniting the world--and growing more exposed to its risks.

- Fully 39% of the parts used in products assembled in the United States originate in other countries.
- Multinational corporations that rely on indigenous workers may be hindered by the increasing number of AIDS cases in Africa and around the world.

70. This international exposure includes a greater risk of terrorist attack.

- The new American policy of paying informants to identify terrorists and warn of planned incidents will inhibit violence by the larger, better-established groups.
- However, nothing will prevent small, local political organizations and special-interest groups from using terror to promote their causes. Serb

threats to bomb major Western cities in response to any intervention in the Bosnian war are one good example of this.

- On balance, the amount of terrorist activity in the world is likely to go up, not down, in the remainder of the decade.

71. Futures studies and forecasting have become a growth industry.

- Future-oriented organizations have gained membership and influence steadily since the early 1960s, when they first appeared. The momentum developed in the 1970s can be expected to grow, and such organizations will have increasing influence on decision-making in government, business, and industry in the years ahead.
- There is now a congressional clearinghouse for futures research as well as the Office of Technology Assessment.

72. American voters increasingly demand accountability in the expenditure of public resources.

- Concern over the federal budget deficit has fueled demands for greater accountability for waste and fraud in government.

73. American consumers increasingly demand social responsibility from companies and each other.

- The growing national resolve to attack social problems such as homelessness, AIDS, drug abuse, and the environment helps fuel this trend.
- Companies will be judged on how they treat the environment.
- With 5% of the world's population and 66% of the lawyers on the planet, American citizens will not hesitate to litigate if their demands are not met

74. Institutions are undergoing a bimodal distribution: The big get bigger, the small survive, and the middle-sized are squeezed out.

- By 2005, 20 major automakers around the world will hold market shares ranging from 18% (GM) to 1% (BMW) . By 2010, there will be only five giant automobile firms. Production and assembly will be centered in Korea, Italy, and Latin America.
- By 2000, just three major corporations will make up the computer hardware industry: IBM, Digital, and Apple.
- The 1990s will be the decade of microsegmentation as more and more highly specialized businesses and entrepreneurs search for narrower niches.
- These small firms will prosper, even as mid-sized, "plain vanilla" competitors die out.
- The bimodal trend extends to:
 - a. Retail stores: Big chain department stores and giant discounters succeed; so do small boutiques.
 - b. Hotels: Both large, luxurious hotel chains and economy hotels are thriving. Mid-priced family operations are being squeezed out.
 - c. Restaurants: Both elegant dining and cheap, fast-food restaurants are making it at the expense of sit-down family restaurants.
 - d. Hospitals: Large hospital corporations and small walk-in medical centers are flourishing. Single independent hospitals and small chains are being absorbed by the large corporations.

Appendix E

Fifty Major World Trends

Population

1. In the industrialized countries, the "birth dearth" has cut growth almost to nothing, while in the developing world, the population bomb is still exploding.

- The rich get richer, the poor have children: Throughout the industrialized world, workers can look forward to national retirement programs or social security. In the developing lands, those too old for labor rely on their children to support them - so they have as many as they can.
- Thanks to better health care, children have a greater chance to survive into adulthood and produce children of their own. This will tend to accelerate population growth, but contraceptive use is increasing, with an opposite effect on growth.
- In the developed world, the vast Baby Boom generation is approaching middle age, threatening to overwhelm both medical and social security programs. These costs will consume an increasing portion of national budgets until about 2020.

2. The AIDS epidemic will slaughter millions of people worldwide, especially in Africa.

- In Sub-Saharan Africa over six million adults are already infected with HIV. In Asia, which holds more than half of the world's population, the dramatic rise in seroprevalence between 1987 and 1991 in South and Southeast Asia may well parallel that seen in the Sub-Saharan Africa in

the early 1980's, and by the mid- to late 1990s more Asians than Africans will be infected each year. In Sub-Saharan Africa alone 10 to 15 million people will be orphaned by the year 2000, as their parents die of AIDS. A similar scenario can be expected in Asia, Latin America, and other parts of the developing world in the first decade of the twenty-first century. In June 1992, the Harvard-based Global Aids Policy Coalition issued a worst-case estimate much higher than forecasts by the World Health Organization (WHO). The report projected that as many as 120 million people will be infected with HIV in the year 2000, with a low-end estimate of 40 million, which is the total projected by the WHO. (Almanac 1993, page 85)

- By 1990, some 5 million people in sub-Saharan Africa already carried the disease - twice as many as just three years earlier. In some cities, as much as 40 percent of the population may be infected.

3. A host of new medical technologies will make life longer and more comfortable in the industrialized world. It will be many years before these advances spread to the developing countries.

- For instance, a recent survey by the U.S. Public Health Service reports that work places are becoming healthier. The survey found that in 1993, 81 percent of U.S. employers offered at least one health-related activity to their employees, a 25 percent increase since 1985. (The Futurist Sept.-Oct. 1993, page 56)

4. As the West grows ever more concerned with physical culture and personal health, developing countries are adopting the unhealthy practices that wealthier

nations are trying to cast off: smoking, high-fat diets, and sedentary lifestyles. To those emerging from poverty, these deadly luxuries are symbols of success.

- Only 30.9 percent of American men smoke, down from 50.2 percent in 1965; 25.3 percent of women smoke, down from a peak of 31.9 percent.
- However, the developing world continues to smoke more each year. Even Europe shows little sign of solving this problem.

5. Better nutrition and the "wellness" movement will raise life expectancies.

- Children born in 1990 will live an average of 72.0 years for males and 78.8 years for females. The U.S. Bureau of the Census projects that this will rise to 74.4 and 81.3 years, respectively, in the year 2010. (92STAT103)

Food

6. Farmers will continue to harvest more food than the world really needs, but inefficient delivery systems will prevent it from reaching the hungry.

- The Food and Agriculture Organization of the United Nations (FAO) estimates the persistence of undernutrition in the world around 500 million people. (page 293, Global Outlook)

7. The size and number of farms are changing.

- In the United States, the family farm is quickly disappearing. Yet, giant agribusinesses reap vast profits, while small, part-time "hobby" farms also survive. This trend will begin to affect other developed nations during the 1990s and will eventually spread to the rest of the world.
- The U.S. farm population declined from 2.8 percent of the total population in 1980 to 1.9 percent in 1990. (92STAT1073)

- Between 1974 and 1987 the number of farms with a size less than 50 acres increased 17 percent. The number of farms with a size above 1,000 acres increased 9 percent. The number of intermediate farms declined with 20 percent. (92STAT1079 and Forecasting International)
- Former Iron Curtain countries will find it difficult to turn their huge, inefficient collective farms back to private owners; progress in this effort will be uneven.
- Land reform in the Philippines and Latin America will move at a glacial pace, showing progress only when revolution threatens. Most of the vast holdings now owned by the rich and worked by the poor will survive into the twenty-first century.

8. Science is increasing the world's supply of food.

- According to the U.S. Office of Technology Assessment, biotechnology and other yield-increasing developments will account for five-sixths of the growth in world harvests by 2000; the rest will come from newly cultivated croplands.
- Biotechnology is bringing new protein to developing countries. Bovine growth hormone can produce 20 percent more milk per pound of cattle feed, while genetic engineering is creating fish that grow faster in aqua farms.

9. Food supplies will become healthier and more wholesome.

- Most nations will adopt higher and more-uniform standards of hygiene and quality, the better to market their food products internationally. Consumers the world over will benefit.

10. Water will be plentiful in most regions. Total use of water worldwide by 2000 will be less than half of the stable renewable supply. Yet, some parched, populous areas will run short.

- The amount of water needed in western Asia will double between 1980 and 2000. The Middle East and the American West are in for dry times by the turn of the century. Two decades later, as many as twenty-five African nations may face serious water shortages.
- We already know how to cut water use and waste-water flows by up to 90 percent. In the next decade, the industrialized countries will finally adopt many of these water-saving techniques. Developing countries reuse little of their waste water, because they lack the sewage systems required to collect it. By 2000, building this needed infrastructure will become a high priority in many parched lands.
- Cheaper, more-effective desalinization methods are on the horizon. In the next twenty years, they will make it easier to live in many desert areas.

Energy

11. Despite all the calls to develop alternative sources of energy, oil will provide more of the world's power in 2000 than it did in 1990.

- OPEC will supply most of the oil used in the 1990s. Demand for OPEC oil grew from 15 million barrels a day in 1986 to over 20 million just three years later. By 2000, it will easily top 25 million barrels daily.

12. Oil prices are not likely to rise; instead, by 2000 they will plummet to between \$7 and \$9 a barrel. A number of factors will undermine oil prices within the next 10 years:

- Oil is inherently cheap. It cost only \$1.38 per barrel to lift Saudi oil out of the ground. Even Prudhoe Bay and North Sea oil cost only \$5 per barrel.
- The twenty most-industrialized countries all have three-month supplies of oil in tankers and storage tanks. Most have another three months' worth in "strategic reserves." If OPEC raises its prices too high, its customers can afford to stop buying until the costs come down. This was not the case during the oil shocks of the 1970s.
- OPEC just is not very good at throttling back production to keep prices up when its market is glutted. It will not get any better at doing so in the 1990s.

13. Growing competition from other energy sources will also help to hold down the price of oil:

- Natural gas burns cleanly, and there is enough of it available to supply the world's entire energy need for the next 200 years.
- Solar, geothermal, wind-generated, and wave-generated energy sources will contribute where geographically and economically feasible, but their total contribution will be small.
- Nuclear plants will supply 12 percent of the energy in Eastern Europe and the former Soviet Union by the end of the century.

Environment

14. Air pollution and other atmospheric issues will dominate eco-policy discussions for years to come.

- Soot and other particulates will be more carefully scrutinized in the near future. Recent evidence shows that they are far more dangerous than sulfur

dioxide and other gaseous pollutants formerly believed to present major health risks. In the United States alone, medical researchers estimate that as many as 60,000 people may die each year as a direct result of breathing particulates. Most are elderly and already suffering from respiratory illness.

- By 1985, the concentration of carbon dioxide in the atmosphere had increased 25 times since pre industrialized days. By 2050, the concentration is likely to increase 40 percent over today's levels if energy use continues to grow at its current pace. Burning fossil fuel will spew about 7 billion tons of carbon into the air each year by 2000, 10 billion to 14 billion in 2030, and 13 billion to 23 billion in 2050.
- Blame global warming for at least some of the spread of Africa's deserts. Before the process runs its course, two-fifths of Africa's remaining fertile land could become arid wasteland. Up to one-third of Asia's non-desert land and one-fifth of Latin America's may follow. Global warming will not only hurt agriculture, but will also raise sea levels, with consequent impacts on habitation patterns and industries.
- Brazil and other nations will soon halt the irrevocable destruction of the earth's rain forests for very temporary economic gain. Those countries will need economic help to make the transition. The World Bank and the International Monetary Fund (IMF) will help underwrite alternatives to rain-forest destruction.
- Acid rain such as that afflicting the United States and Canada will appear whenever designers of new power plants and factories neglect emission-control equipment. Watch for it in most developing countries.

15. Disposal of mankind's trash is a growing problem, especially in developed nations. Within the next decade, most of the industrialized world will all but run out of convenient space in its landfills.

- The U.S. Environmental Protection Agency estimates that existing technologies could reduce the total amount of hazardous waste generated in the United States by 15 percent to 30 percent by 2000.
- For now, recycling is a necessary nuisance. By 2000, recyclables will become valuable resources, as research finds profitable new uses for materials currently being discarded. Recycling will save energy as well: remanufacturing requires less energy than does the full iron-ore-to-Cadillac production process.

Science and Technology

16. High-technology turnover rates are accelerating.

- All the technological knowledge we work with today will represent only 1 percent of the knowledge that will be available in 2050.

17. Technology has come to dominate the economy and society in the developed world. Its central role can only grow.

- For some economists, the number of cars, computers, telephones, facsimile machines, and copiers in a nation define how "developed" the country is.
- Personal robots will appear in homes in the developed world by 2000. Robots will perform mundane commercial and service jobs and environmentally dangerous jobs, such as repairing space-station components in orbit.

18. The technology gap between developed and developing countries will continue to widen.

- Developed countries have ten times as many scientists and engineers per capita as the developing world. The gap between their spending on research and development has tripled in recent years.
- Technologically underdeveloped countries face antiquated or nonexistent production facilities, a dearth of useful knowledge, ineffective organization and management, and a lack of technical abilities and skills. Under these conditions, underdevelopment is often self-perpetuating, which weakens the country's ability to compete in international markets.
- The widening technology gap will aggravate the disparity in North-South trade, with the developed nations of the Northern Hemisphere supplying more and more high-tech goods. The less-developed countries of the South will be restricted to exporting natural resources and relatively unprofitable low-tech manufactured products.

19. Nations will exchange scientific information more freely, but will continue to hold back technological data.

- Basic research is done principally in universities, which have a tradition of communicating their findings.
- Technological discoveries, in contrast, often spring from corporate laboratories, whose sponsors have a keen interest in keeping them proprietary. More than half of the technology transferred between countries will move between giant corporations and their overseas branches or as part of joint ventures by multinationals and foreign partners.

- Fifty-three percent of Ph.D. candidates in U.S. science and engineering programs are from other countries. Anything they learn will return to their homelands when they do.
- The space-faring nations--soon to include Japan--will share their findings more freely.

20. Research and development (R&D) will play an ever-greater role in the world economy.

- R&D outlays in the United States have varied narrowly (between 2.1 percent and 2.8 percent of the GNP) since 1978, stabilizing at a 2.7 percent in 1988.
- R&D spending is growing most rapidly in the electronics, aerospace, pharmaceuticals, and chemical industries.

Communications

21. Communications and information are the lifeblood of a world economy. Thus, the world's communications networks will grow ever more rapidly in the next decade.

- A constellation of satellites providing position fixing and two-way communication on Earth, 24 hours a day, will be established in the 1990s. A person equipped with a mini-transceiver will be able to send a message anywhere in the world.

22. The growing power and versatility of computers will continue to change the way individuals, companies, and nations do their business.

- Processing power and operating speeds for computers are still increasing. By 2000, the average personal computer will have at least fifty times the

power of the first IBM PCs and one-hundred or more times the power of the original Apple II.

- Computers and communications are quickly finding their way into information synthesis and decision making. Using voice recognition and limited vocabularies, after being trained to understand the speaker, they can already transcribe dictation. Computers will also translate documents into various languages. Today's best translation programs can already handle a 30,000-word vocabulary in nine languages.
- The revolution in computers and communications technologies offers hope that developing countries can catch up with the developed world. However, few have yet been able to profit from the new age of information. In 1985, developing countries owned only 5.7 percent of the total number of computers in the world; most of these computers are used mainly for accounting, payroll processing, and similar low-payoff operations.
- Your computer may become your personal coach for information analysis, decision-making and monitoring. Currently as many as 26 million workers in the U.S. are monitored in their jobs. This number will increase as computers are used more and more within companies and the cost of these monitoring systems goes down. (The Futurist, Sept.-Oct. 1993 page 33)

Labor

23. The world's labor force will grow by only 1.5 percent per year during the 1990s - much slower than in recent decades, but fast enough to provide most countries with the workers they need. In contrast, the United States faces shortages of labor in general, and especially of low-wage-rate workers.

- Multinational companies may find their operations handicapped by loss of employees and potential workers to the worldwide epidemic of AIDS, especially in Africa, since many firms rely on indigenous workers.

24. The shrinking supply of young workers in many countries means that the overall labor force is aging rapidly.

- Persons aged 25 to 59 accounted for 65 percent of the world labor force in 1985; almost all growth of the labor force over the next decade will occur in this age group.

25. Unions will continue to lose their hold on labor.

- Union membership is declining steadily in the United States. Between 1983 and 1991, the union membership has declined from 20.1 percent of the work force to 16.1 percent. (92STAT672)
- Unionization in Latin America will be about the same as in the 1980s; unionization in the Pacific Rim will remain low; unionization in the developing world as a whole will remain extremely low.
- Increased use of robots, CAD/CAM, and flexible manufacturing systems can cut a company's work force by up to one-third.
- Growing use of artificial intelligence, which improves productivity and quality, will make the companies adopting it more competitive, but will reduce the need for workers in the highly unionized manufacturing industries.

26. People will change residences, jobs, and even occupations more frequently, especially in industrialized countries.

- High-speed MAGLEV trains will allow daily commutes of up to 500 miles.
- The number of people who retrain for new careers, one measure of occupational mobility, has been increasing steadily.
- The new information-based organizational management methods - non-hierarchical, organic systems that can respond quickly to environmental changes - foster greater occupational flexibility and autonomy.

27. The wave of new entrepreneurs that appeared in the United States during the 1970s and 1980s is just the leading edge of a much-broader trend.

- New business incorporations hit all-time high in 1986 and has gone down ever since. By 1991, they had declined to 629,000. (92STAT845)
- From 1988 to 1990, small businesses created 4,015,000 new jobs, versus a loss of 501,000 by companies with more than 500 employees. (92STAT851)

28. More women will continue to enter the labor force.

- Women represent 48.2 percent of the U.S. civilian labor force and is projected by the U.S. Bureau of Labor Statistics to grow to a 58.9 percent in 2005. (92STAT609)

Industry

29. Multinational and international corporations will continue to grow, and many new ones will appear.

- Companies will expand their operations beyond national borders. For example, Marconi Space Systems (a British General Electric company) and

Matra Espace (of France) got together to form Matra Marconi Space, "the first international space company."

- Many other companies will go international by locating new facilities in countries that provide a labor force and benefits such as preferential tax treatment, but that do not otherwise participate in the operation. Ireland pioneered this practice with U.S. companies in the insurance, electronics, and automobile industries. It found that when companies leave, for whatever reason, the country loses revenue and gains and unemployed labor force.

30. Demands will grow for industries to increase their social responsibility.

- A wide variety of environmental disasters and public-health issues (e.g., the Exxon Valdez oil spill and Union Carbide's accident at Bhopal, India) have drawn public attention to the effects of corporate negligence and to situations in which business can help solve public problems not necessarily of their own making.
- In the future, companies will increasingly be judged on how they treat the environment - and will be forced to clean up any damage resulting from their activities.
- Deregulation will be a thing of the past. Governments increasingly will intervene in many businesses: Airlines will be compelled to provide greater safety and services; the financial-service industry will be regulated to reduce economic instability and costs; electric utilities will be held responsible for nuclear problems; and chemical manufacturers will have to cope with their own toxic wastes.

31. *The 1990s will be the decade of micro segmentation, as more and more highly specialized businesses and entrepreneurs search for narrower market riches.*

Education and Training

32. *Literacy will become a fundamental goal in developing societies, and the developed world will take steps to guard against backsliding toward illiteracy. Throughout the world, education (especially primary school for literacy) remains a major goal for development as well as a means for meeting goals for health, higher labor productivity, stronger economic growth, and social integration. Countries with a high proportion of illiterates will not be able to cope with modern technology or use advanced agricultural techniques.*

- Most developed countries have literacy rates of more than 95 percent. The increasing levels of technological "savvy" demanded by modern life, however, often are more than people are prepared to meet, even in the most modern societies.
- The proportion of illiterates among the world's adult population has steadily decreased, although the absolute number has grown. In developing countries, the proportion of illiterates will drop from 39 percent in 1985 to 28 percent by 2000, while the number of illiterate adults will have climbed by 10 million.
- Worldwide, the proportion of children not enrolled in school will fall from 26 percent in 1985 to 18 percent by 2000. Primary-education enrollment has risen dramatically in most of the developing world except for Africa. In 31 sub-Saharan countries reporting school enrollments, the rates had fallen for boys in 13 countries and for girls in 15.

- Useful, job-oriented knowledge is becoming increasingly perishable. The half-life of an engineer's professional information today is five years.

33. Educational "perestroika" is changing American schools. In the long run, this will repair the nation's competitive position in the world economy.

- The information economy's need for skilled workers requires educational reform.
- Science and engineering schools will be actively recruiting more students.
- Foreign-exchange programs will grow markedly in an attempt to bolster the competence of American students in international affairs.

34. Higher education is changing as quickly as primary and secondary schools.

- Tuition and required fees have increased rapidly, especially for private schools. Between 1975 and 1990, these fees have risen by more than 300 percent for public schools and 380 percent for private schools. (92STAT269)
- The soaring cost of higher education may force program cuts. If so, developing countries face an ultimate loss of foreign exchange, as their industries fall further behind those of cheaper, more-efficient competitors.
- There are too few jobs for liberal arts college graduates in many developing countries. For instance, Egypt cannot keep its promise to give a job to every graduate; the civil service is grossly overstaffed already.
- The concept of "university" is changing. Increasingly, major corporations are collaborating with universities to establish degree-granting corporate schools and programs. Examples include the General Motors Institute, Pennsylvania State University's affiliation with a major electronics com-

pany, and Rutgers University's affiliation with a major pharmaceutical house.

- More private companies will market large electronic databases, eventually replacing university libraries.

World Economy

35. The world economy will grow at a rapid rate for the foreseeable future, but the gap between rich and poor countries will widen.

- World trade will grow at a brisk 4.5 percent annually in the next decade. As one result, international competition will continue to cost jobs and income in the developed market economies.
- The gross domestic products (GDPs) of the developed market economies will grow at 3.1 percent on average in the 1990s as investment demand increases and the economic integration in Europe introduces capital efficiency.
- The economies of Eastern Europe and the former Soviet Union may recover with a GDP growth rate of 3.6 percent.
- The developing economies will fall further and further behind the industrialized nations, largely because their populations will continue to rise faster than their incomes. GDPs in the developing economies will grow by 4.3 percent a year (well below the 5.1 percent rate they enjoyed in the 1970s). In the 1970s, their per capita GDP was one-tenth that of the developed countries. By 1985, it had fallen to one-twelfth. By 2000, it will be one-thirteenth.
- By reducing military budgets, the fabled "new world order" will make more money available for business.

36. *The world economy will become increasingly integrated.*

- There is a "ripple effect" among closely linked national stock exchanges. The impact of a major event on one exchange perturbs all the others. Stock markets will become more fully connected and integrated.
- By 2000 or so, and probably a bit sooner, the world's reasonably hard currencies all will be made convertible.
- It will become increasingly difficult to label a product by nation (e.g., "Japanese cars"), since parts often come from several countries to be assembled in others and sold in yet others. Protective tariffs will become obsolete - for the good of the worldwide economy.

37. *The world economy is quickly dividing itself into three major blocs: the European Community, the North American free-trade zone, and Japan's informal but very real Pacific development area. Eastern Europe will ally itself with the EC, as Mexico has done with the United States and Canada. The nations of Latin America will slowly build ties with their neighbors to the North. The Australia-New Zealand bloc is still trying to make up its mind which of these units to join - the Pacific Rim, where its nearest markets are, or Europe and North America, where its emotional bonds are strongest.*

- The economic structure of all these regions is changing rapidly. All but the least-developed nations are moving out of agriculture. Service sectors are growing rapidly in the mature economies, while manufacturing is being transferred to the world's developing economies.
- Within the new economic blocs, multinational corporations will not replace the nation-state, but they will become far more powerful, especially as governments relinquish aspects of social responsibility to employers.

38. The European Community will become a major player in the world economy.

- By 1992, the EC will represent a population of 325 million people with a \$4-trillion GDP.
- By 1996, the European Free Trade Association countries will join with the EC to create a market of 400 million people with a \$5-trillion GDP. Sweden, Norway, Finland, Austria, and Switzerland will join the founding 12.
- By 2000, most of the former East Bloc countries will be associate members of the EC.

39. The twenty-five most-industrialized countries will devote between 2 percent and 3 percent of their GDP to help their poorer neighbors.

- Much aid to poorer countries will be money that formerly would have gone to military budgets.
- The World Bank and IMF will help distribute funds.
- Loans and grants may require developing nations to set up population-control programs.

40. Western bankers will at last accept the obvious truth: Many Third-World debtors have no hope of ever paying back overdue loans. Creditors will thus forgive one-third of these debts. This will save some of the developing nations from bankruptcy and probable dictatorship.

41. Developing nations once nationalized plants and industries when they became desperate to pay their debts. In the future, the World Bank and the IMF will refuse to lend to nations that take this easy way out. (Debtors, such as Peru, are

eager to make amends to these organizations.) Instead, indebted nations will promote private industry in the hope of raising needed income.

42. Washington, D.C., will supplant New York as the world financial capital. The stock exchanges and other financial institutions, especially those involved with international transactions, will move south to be near Congress, the World Bank, and key regulatory bodies.

- Among the key economic players already in Washington: the Federal Reserve Board, the embassies and commercial/cultural attaches of nearly every country in the world, and the headquarters of many multinational and international corporations.
- In addition, several agencies cooperating with the United Nations, including the International Monetary Fund and the General Agreement on Tariffs and Trade, have their headquarters or routinely conduct much of their business in Washington.

Warfare

43. The world has been made "safer" for local or regional conflicts. During the Cold War, the superpowers could restrain their aggressive junior allies from attacking their neighbors. With the nuclear threat effectively gone, would-be antagonists feel less inhibited. Iraqi President Saddam Hussein was only the first of many small despots who will try to win by conquest what cannot be achieved by negotiation.

- Now that the Warsaw Pact has disintegrated, NATO, seeking a new purpose, will eventually become an emergency strike force for the United Nations. The number of guns, tanks, and military planes in Europe will fall to little more than half their peak levels.

- Terrorist states will continue to harbor chemical and biological weapons until the international community finally takes a firm stand.

44. Brushfire wars will grow more frequent and bloody. Among the most likely are:

- Israel vs. the Arab countries. We foresee one last conflict in this region before the peace that now seems near actuality becomes a reality. Israel will win this one, too.
- India vs. Pakistan. The two have feuded with each other since the British left in 1947; religious differences, separatism in Kashmir, and small stocks of nuclear weapons make this a hot spot to watch carefully.
- Northern Ireland vs. itself. This perpetually troubled land will remain its own worst enemy. In trying to keep Ireland under control, the British face an increasingly unpleasant task.

45. Tactical alliances formed by common interests to meet immediate needs will replace long-term commitments among nations.

- In the Middle East, "the enemy of your enemy is your friend." Iran and Iraq will tolerate each other in their stronger hatred for the West. The United States and Syria will never be true friends, but both dislike Iraq enough to ignore their differences.
- Turkey and Greece will be hard-pressed to overlook their hostility over Cyprus, but may do so in an effort to counter terrorism.

International Alignments

46. The Information Revolution has enabled many people formerly insulated from outside influences to compare their lives with those of people in other coun-

tries. This knowledge has often raised their expectations, and citizens in many undeveloped and repressed lands have begun to demand change. This trend can only spread as world telecommunications networks become ever more tightly linked.

- East Germans learned of reforms elsewhere in Eastern Europe via West German television; Romanians learned through Hungarian media.
- International broadcasters such as Voice of America, the British Broadcasting Corporation, and Cable News Network disseminate information around the world, sometimes influencing and inspiring global events even as they report on them.

47. Politically, the world's most important trend is for nations to form loose confederations, either by breaking up the most centralized nations along ethnic and religious lines or by uniting independent countries in international alliances.

- Quebec will secede from Canada, probably in 1996. The four eastern Canadian provinces will be absorbed into the United States by 2004; the other Canadian provinces will follow suit by 2010.
- Hong Kong and Macao will rejoin China, through previously made agreements, by 1997. Taiwan will seek to join mainland China shortly thereafter. The two Koreas will reunite before 2000.

48. The major international organizations will take on new importance:

- The United Nations will finally be able to carry out its mission. The World Court will enjoy increased prestige. UNESCO's food, literacy, and children's health funds will be bolstered. The World Health Organization will make progress in disease eradication and in training programs. The Food and Agricultural Organization will receive more funding for starvation relief and programs to help teach farming methods.

- More countries will be willing to reform internally to meet requirements for International Monetary Fund loans and World Bank programs that provide development and education funds and grants.
- More medical aid from developed countries will be provided, frequently under the auspices or coordination of the United Nations or Red Cross/Red Crescent, to countries devastated by plagues, famine, or other natural disasters. Red Cross and Red Crescent will step up activities in such areas as natural-disaster relief and blood programs.
- Cooperation will develop among intelligence agencies from different countries (e.g., Interpol, the CIA, and the KGB) in order to monitor terrorism and control antiterrorism programs and to coordinate crime fighting worldwide.

49. International bodies will take over much of the peacekeeping role now being abandoned by the superpowers. The Conference on Security and Cooperation in Europe (CSCE) - will pick up where NATO and the Warsaw Pact left off by creating a pan-European security structure.

- The CSCE will transform the diplomatic process into an institution.
- The methods of operation for voting on CSCE matters will likely be revised (currently, each of the member nations holds veto power).

50. The field of public diplomacy will grow, spurred by advances in communication and by the increased importance and power of international organizations.

Appendix F

Critical Technologies for the Future

This appendix contains the thirteen (13) summary matrices developed by Dr. William E. Halal for his article "The Information Technology Revolution", and published in *Technological Forecasting and Social Change* 44, 69-86 (1993).

1. ARTIFICIAL INTELLIGENCE

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|--|------------------------|-------------|--------------------------------|-------------------|
| 1. Expert systems are commonly used to make routine decisions in management finance, engineering, and other fields. | .88 | 1998 | 17.00 | US |
| 2. Most ordinary software is generated automatically. | .82 | 2003 | 21.29 | US |
| 3. Neural networks using parallel processors become dominant. | .71 | 2003 | 42.29 | US |
| 4. Sophisticated software is used for personalized educational instruction, medical diagnosis, playing games such as chess, etc. | .95 | 1996 | 18.29 | US |
| 5. Computer programs have the capacity to learn by trial and error in order to adjust their behavior. | .86 | 2004 | 26.50 | US |
| 6. Voice access computers permit faster, more convenient interaction between humans and machines. | .84 | 2002 | 29.81 | US |
| AVERAGE FOR CATEGORY | .84 | 2000 | 25.86 | US |

2. ALTERNATIVE ENERGY

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|---|------------------------|-------------|--------------------------------|-------------------|
| 1. Most homes and offices have a solar/ photovoltaic energy system to augment their conventional energy system | .67 | 2023 | 64.14 | US |
| 2. Large companies derive a significant portion of their power from solar, wind, or other alternative energy sources. | .65 | 2022 | 38.64 | US |
| 3. Fission nuclear power overcomes its present liabilities in the U.S. to become a major source of energy. | .64 | 2018 | 57.43 | US |
| 4. Electric cars, augmented by solar panels, become available for travel for short distance usage. | .73 | 1999 | 17.19 | US |
| 5. Conservation continues to improve efficiency so that energy use per capita drops by half. | .52 | 2018 | 32.50 | US |
| AVERAGE FOR CATEGORY | .64 | 2016 | 41.98 | US |

3. AUTOMATED FACTORIES

| | Probability (0 – 1) | Year | U.S. Market value (Billions) | Leading Nation |
|--|------------------------|------|---------------------------------|-------------------|
| 1. Robots are commonly used for most factory operations. | .83 | 2006 | 59.38 | JAPAN |
| 2. Most sophisticated robots are available that have sensory input, make decisions, can learn, and are mobile. | .87 | 2005 | 25.63 | JAPAN |
| 3. Automation proceeds such as the blue collar work declines to less than 10% of the work force. | .61 | 2017 | 240.00 | JAPAN |
| 4. U.S. factories are so automated that they are operated by a few dozen workers. | .71 | 2019 | 110.71 | US, |
| 5. Products like autos and refrigerators are custom ordered. | .68 | 2018 | 106.08 | JAPAN |
| AVERAGE FOR CATEGORY | .74 | 2013 | 108.36 | JAPAN |

4. BIOGENETICS AND MEDICINE

| | Probability (0 – 1) | Year | U.S. Market value (\$Billion) | Leading Nation |
|---|------------------------|------|----------------------------------|-------------------|
| 1. Most genetic diseases can be cured. | .51 | 2015 | 49.17 | US |
| 2. Parents can choose the characteristics of their children. | .58 | 2019 | 25.90 | US |
| 3. Bodily parts are replaceable to the point that cyborg-type human becomes a reality. | .53 | 2033 | 96.17 | US |
| 4. Sophisticated drugs are developed that can cure cancer, AIDS, and other now incurable diseases. | .82 | 2015 | 84.38 | US |
| 5. Computerized information systems automate medical care, including diagnosis, prescription, research, and monitoring. | .92 | 2004 | 45.25 | US |
| 6. Holistic approaches to health care become accepted by the majority of the medical profession. | .73 | 2017 | 68.33 | US, EEC |
| AVERAGE FOR CATEGORY | .68 | 2017 | 61.53 | US |

5. COMPUTER HARDWARE

| | Probability (0 - 1) | Year | Market value \$ (Billions) | Leading Nation |
|--|------------------------|------|-------------------------------|-------------------|
| 1. Optical computers enter the commercial market. | .86 | 2000 | 37.14 | US |
| 2. A portable computer about the size of a writing pad is commonly used by most people to manage their personal affairs and work. | .85 | 2002 | 19.38 | JAPAN |
| 3. The U.S. is connected together by a public computer network that permits access to libraries of data, electronic messages, video teleconferencing, common software programs, etc. | .84 | 2007 | 35.00 | US |
| AVERAGE FOR CATEGORY | .85 | 2003 | 30.51 | US |

6. ENVIRONMENTAL CONTROL

| | Probability (0 - 1) | Year | U.S. Market value (\$Billion) | Leading Nation |
|---|------------------------|------|----------------------------------|-------------------|
| 1. Most manufacturers adopt a "Green" philosophy that genuinely avoids environmental pollution. | .82 | 2008 | 83.00 | US |
| 2. The majority of manufactured goods use recycled materials. | .57 | 2020 | 243.00 | JAPAN |
| 3. American households recycle more than half of their waste. | .73 | 2011 | 51.25 | US |
| 4. Household garbage is typically composted into fertilizer for the garden. | .26 | 2010 | 27.50 | EEC |
| 5. The transition from CFCs to environmentally acceptable gases such as HFCs is completed. | .75 | 2007 | 261.00 | US |
| AVERAGE FOR CATEGORY | .63 | 2011 | 133.15 | US |

7. INFORMATION SERVICES

| | Probability (0 - 1) | Year | Market value \$ (Billions) | Leading Nation |
|---|------------------------|------|-------------------------------|-------------------|
| 1. Access to library materials via computer is more convenient and less expensive than going to the library. | .87 | 2000 | 11.67 | US |
| 2. Half of all workers in the U.S. perform their jobs partially at home using computerized information systems. | .52 | 2009 | 83.00 | US |
| 3. Education is commonly conducted using computerized teaching programs and interactive television lectures and seminars. | .69 | 2002 | 21.00 | US |
| 4. Teleconferencing replaces the majority of business travel. | .40 | 2006 | 48.00 | US |
| 5. Half of all goods in the U.S. are sold through computer services such as Prodigy. | .43 | 2007 | 188.75 | US |
| AVERAGE FOR CATEGORY | .58 | 2005 | 70.48 | US |

8. MATERIAL DESIGN

| | Probability (0 - 1) | Year | U.S. Market value (\$Billions) | Leading Nation |
|--|------------------------|------|-----------------------------------|--------------------|
| 1. Plastics replace the majority of metals in product designs because they are comparable in strength, weight, cost, and durability. | .66 | 2010 | 67.00 | US |
| 2. A ceramic engine is used in a commercially available auto. | .75 | 2003 | 10.33 | US & JAPAN |
| 3. Superconductors become available for special, high-performance usage, such as Magnetic Levitation Trains. | .86 | 2010 | 37.21 | US, EEC & JAPAN |
| 4. Superconductive materials are used in common electric products. | .72 | 2021 | 22.21 | US & JAPAN |
| 5. Half of typical automobiles are made of plastic. | .82 | 2010 | 25.00 | JAPAN |
| AVERAGE FOR CATEGORY | .76 | 2011 | 32.35 | US & JAPAN |

9. NEW MANAGEMENT

| | Probability (0 - 1) | Year | Market value (Billions) | Leading Nation |
|---|------------------------|------|----------------------------|-------------------|
| 1. The structure of most organizations resembles a network, or internal market system, rather than a hierarchical pyramid. | .54 | 2010 | 2.00 | US |
| 2. Participative labor-management relations becomes the norm. | .73 | 2003 | 51.00 | US |
| 3. Corporate performance is evaluated in terms of customer satisfaction, benefits to employees, public impact, and other social indicators in addition to profits for shareholders. | .64 | 1999 | 51.50 | US |
| 4. Major corporations, schools, and other institutions are democratized so that they are governed by a political coalition of managers, employees, clients, the public, and other stakeholders. | .55 | 2006 | 102.50 | US |
| AVERAGE FOR CATEGORY | .61 | 2004 | 51.75 | US |

10. NON-TRADITIONAL FOOD SOURCES

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|---|------------------------|------|--------------------------------|-------------------|
| 1. Sea food grown using aquaculture becomes a major industry, comparable to the livestock industry. | .69 | 2020 | 107.86 | JAPAN |
| 2. A sizable proportion of all produce is grown by hydroponic methods. | .43 | 2029 | 18.33 | US |
| 3. Artificial meats, vegetables, bread, etc. are commercially sold. | .63 | 2009 | 10.33 | US |
| 4. A variety of plant and animal characteristics are produced by manipulating the genetic code. | .84 | 2004 | 22.83 | US |
| AVERAGE FOR CATEGORY | .65 | 2015 | 39.84 | US |

11. ORGANIC FARMING

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|--|------------------------|------|--------------------------------|-------------------|
| 1. The majority of Americans farms practice organic farming techniques. | .47 | 2013 | 43.75 | US |
| 2. Use of chemical fertilizers and pesticides declines by half in the U.S. | .50 | 2009 | 21.75 | US |
| 3. The USDA actively promotes organic farming as a superior alternative to traditional methods because it is more cost-effective and environmentally benign. | .51 | 2009 | 42.33 | US |
| AVERAGE FOR CATEGORY | .49 | 2010 | 35.94 | US |

12. SPACE

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|--|------------------------|------|--------------------------------|-------------------|
| 1. A permanent orbiting laboratory is maintained by the U.S. Government. | .76 | 2012 | 5.25 | US |
| 2. Most unmanned payloads are launched by non-rocket systems, such as a rail gun | .55 | 2022 | 9.60 | US |
| 3. Private corporations perform the bulk of space launches as private ventures. | .54 | 2013 | 25.00 | US |
| 4. A closed Biosystem is launched into space that can sustain humans for a year or more. | .70 | 2020 | 15.20 | US |
| AVERAGE FOR CATEGORY | .64 | 2017 | 13.76 | US |

13. TRANSPORTATION

| | Probability (0 - 1) | Year | U.S. Market value(Billions) | Leading Nation |
|---|------------------------|------|--------------------------------|-------------------|
| 1. Hypersonic planes are used for the majority of transoceanic flights. | .49 | 2044 | 87.50 | US & EEC |
| 2. Maglev trains become available between major cities in the US, such as Washington, New York, and Los Angeles, San Francisco. | .63 | 2023 | 45.43 | JAPAN |
| 3. Electric cars replace most internal combustion cars for city use. | .64 | 2039 | 72.86 | US, EEC & JAPAN |
| 4. Highway travel is commonly guided by automatic systems that control steering, braking, and route selection. | .48 | 2029 | 75.33 | US & EEC |
| AVERAGE FOR CATEGORY | .56 | 2034 | 70.28 | US & EEC |